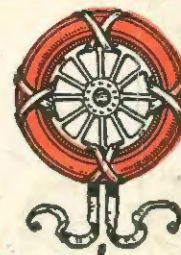


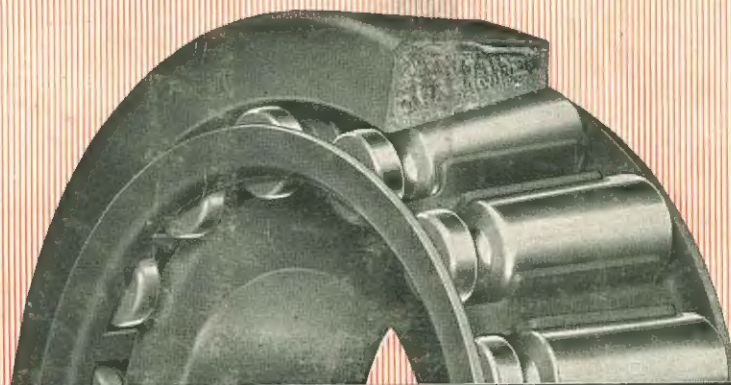


# MOTOR RECORD



OCTOBER, 1922

*"The Place To Get What You Want When You Want It"*



More than 424 American and European manufacturers of motor cars, trucks, and tractors employ Timken Tapered Roller Bearings.

What similarly vital automotive part has ever gained acceptance as universal?

## TIMKEN

*Tapered*

## ROLLER BEARINGS

Canton, Ohio



# Old King Cole Says:



## Quality is First

Without quality as a basis, no battery proposition can be good — no matter what price inducement is offered.

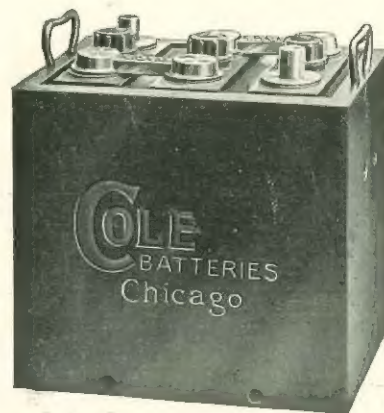
## *Cole Batteries*

are guaranteed  
for 18 months

In the Cole proposition, quality is the first consideration — but the prices will be more than interesting to you.

*Only one grade—the very best.*

Radio Batteries of Greatest Value for the Money



**COLE STORAGE BATTERY CO., Inc.**

2435 Indiana Avenue

Chicago, Illinois



# MOTOR RECORD

Published Monthly  
by

The Ferguson Publishing Company, Inc.  
90 West Street, New York

Vol. XII. No. 4 OCT., 1922 \$3.00 a Year

Entered as Second Class Matter, July 17, 1917, at the Post Office at New York, New York, under the act of March 3, 1879. Copyright 1922.

## TABLE OF CONTENTS

### LEADING ARTICLES

	PAGE
The Noiseless Automobile Is Yet to Be Built .....	5
Profit in Lead Welding and Battery Repairs .....	6
Does Trade Paper Advertising Pay?..	8

### SPECIFICATIONS AND PRICE LISTS

Passenger Car Price List.....	18
Passenger Car Specifications.....	22
Motor Truck Specifications and Prices.....	26
Tractor Specifications and Prices.....	53
Battery Replacement Data.....	57
Lamp Data .....	57
Battery Price List.....	75
Brake Lining Sizes.....	86
Piston Ring Sizes.....	89
Fan Belt Sizes.....	89
Spark Plug Sizes.....	93
Headlight Lens Sizes.....	93
Exhaust Pipe Sizes.....	93
Radiator Hose Sizes.....	97
Price List of Tires and Tubes.....	99
Dealers in Orphan Car Parts.....	108
Bearing Data .....	111

### DEPARTMENTS IN EACH ISSUE

Digest of Current Articles.....	11
New Products .....	13
Trade Gossip .....	16
Editorial Page .....	17
Manufacturers' Notes .....	21
Association News .....	85

# BOCK

## Quality TAPER ROLLER BEARINGS

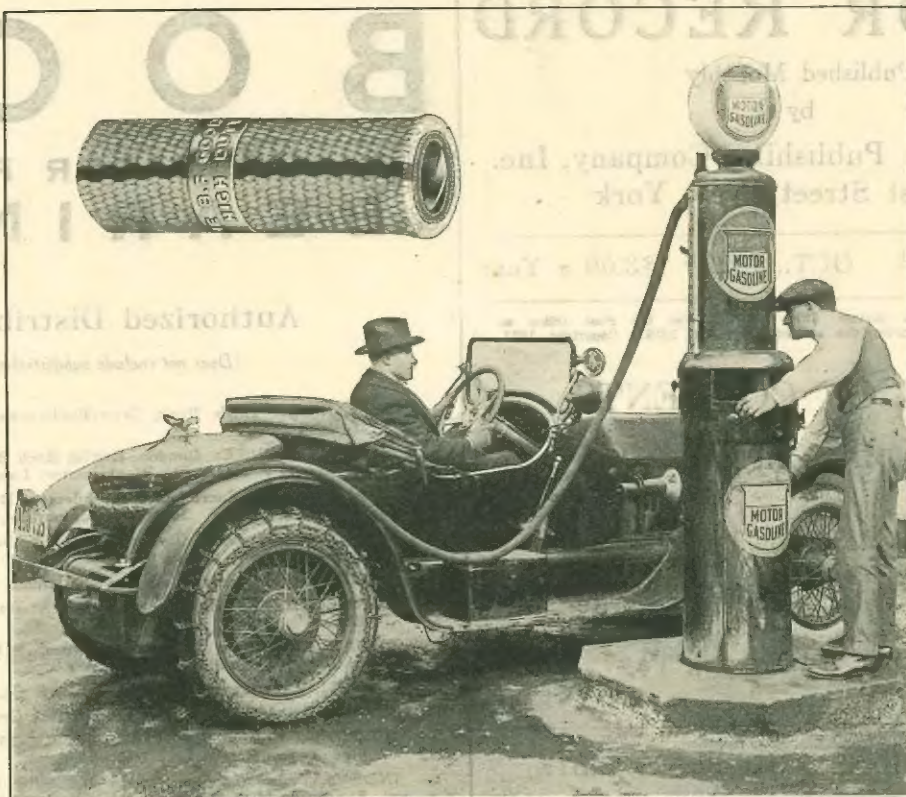
### Authorized Distributors

(Does not include subdistributors)

ARKANSAS: Little Rock, Crow-Burlingame Co., 3rd and Cumberland Sts.  
BRITISH EMPIRE: London, British Bock Bearings, Ltd., Clutha House, 10 Princess St., Westminster, London, England, SW 1.  
CALIFORNIA: Sacramento, Henderson Brothers, 916-12th St. San Francisco, F. Somers Peterson Co., 57 California St.  
CANADA: Montreal, Lyman Tube & Supply Co. Toronto, Lyman Tube & Supply Co.  
COLORADO: Denver, Bearings Equipment Co., 1107 Broadway.  
CONNECTICUT: Bridgeport, Broad Street Garage, 647 Broad Street.  
CUBA: New York, N. Y., Rodriguez & Co., 1457 Broadway. (Auth. dis. for Cuba and S. A.)  
GEORGIA: Atlanta, Southern Bearing Co., 375 Edgewood.  
IOWA: Des Moines, J. M. Walton, 1020 Grand Ave.  
ILLINOIS: Chicago, Berry Bearings Co., 2711 Michigan. Bearings & Equipment Co., 1402 Michigan.  
INDIANA: Indianapolis, Homer A. Keller Co., 415 N. Capitol. Evansville, Lannert Mfg. Co., 208 So. 6th St.  
KANSAS: Wichita, Johnson Bros. Auto Supply Co., 227 Lawrence Ave. Topeka, Southwick Auto Supply Co., 925 Kansas.  
KENTUCKY: Louisville, Hodapp & Miller, 119 S. 7th St.  
LOUISIANA: Monroe, Motor Supply Co.  
MARYLAND: Baltimore, Motor Parts Corporation, 1419 Charles Street.  
MASSACHUSETTS: Boston, Bearings & Motor Equipment Co., 744 Commonwealth Ave.  
MICHIGAN: Detroit, Detroit Ball Bearing Co., 2812 Grand River Ave.  
MINNESOTA: Minneapolis, Reinhard Brothers Co., Inc.  
MISSOURI: Kansas City, K. C. Bearings & Ring Sales Co., 2110 Grand Ave.  
MONTANA: Great Falls, Montana Bearing Co., 324 Second Ave., S.  
NEW YORK: Buffalo, Buffalo Bearings Co., 1030 Main St. New York, R. & L. Bearings Co., 1819 Broadway.  
NORTH CAROLINA: Charlotte, Southern Bearings Co., Inc., 12 S. Poplar St.  
OHIO: Cincinnati, E. J. Hebbard Co., 205 E. 8th St. Cleveland, Detroit Ball Bearing Co., 6715 Carnegie. Columbus, The Bearings Co., 75 S. 4th St. Toledo, Arbogast Tire & Supply Co.  
OKLAHOMA: Oklahoma City, Sharp Auto Supply Co., 406 N. Broadway.  
OREGON: Portland, West Bearing Co., 452 Burnside St.  
PENNSYLVANIA: Philadelphia, Eastern Bearings Co., 807 N. Broad St. Pittsburgh, Condon Bearings & Supply Co., Highland Bldg.  
SOUTH CAROLINA: Sumter, R. & S. Bearings Co., 212 W. Liberty.  
TENNESSEE: Nashville, Automobile Bearings Co., Inc., 620 Commerce St.  
TEXAS: Dallas, Western Gears & Parts Co., 317 Bourbon St. Fort Worth, Western Gears & Parts Co.  
UTAH: Salt Lake City, Mendenhall Auto Parts Co., 36 S. W. Temple St.  
VIRGINIA: Norfolk, Norfolk Motorists' Supply Co., Granby and Queen Sts.  
WYOMING: Rawlins, Rawlins Motor Company. Casper, Wyoming Automotive Company.  
WASHINGTON: Seattle, Northwest Bearings Co.

THE BOCK BEARING COMPANY  
TOLEDO, OHIO





## The Gasoline Hose without a Drawback

Here is where a half century of rubber experience saves you money, time and trouble. Gasoline and rubber are natural enemies—it has taken Goodrich years to discover how to make them friends, and Goodrich has patented the secret.

### No more rubber in "gas" tanks

The devitalizing action of gasoline on the rubber tube is conquered by a special Goodrich compound. The tube is further protected by a fabric liner held firmly in place by an inner coil

of flat wire. Tube cannot check, soften, crack, become porous or peel. Particles of rubber cannot find their way to the automobile gas tank—there are none.

### Weather-proof

Goodrich "HIGH DUTY" Gasoline Hose has an extra heavy woven cotton jacket—dampness, dust, sun, rain, and frost cannot rot or crack it.

Meets all requirements of underwriters.

Your Goodrich Branch has this perfect gasoline hose in stock—in  $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", and 1 $\frac{1}{2}$ " sizes.

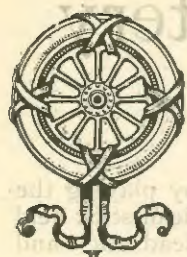
THE B. F. GOODRICH RUBBER COMPANY

Akron, Ohio

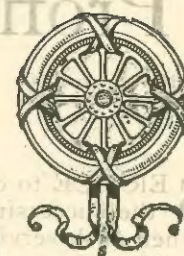
# GOODRICH

## Gasoline Hose





# MOTOR RECORD



Vol. XII.

OCTOBER, 1922

No. 4

## The Noiseless Automobile Is Yet to Be Built

Much Has Been Accomplished Towards Making Cars Quiet in Operation, But There Is Still Plenty of Room for Further Improvements

By EDWARD G. INGRAM

ALMOST everyone who lives close to a busy street or road will agree with the statement that the average car is far from noiseless in operation. No car, in fact, is noiseless in operation even under ideal conditions, or, in other words, when operating at a moderate speed on a perfectly smooth, level road, though from a relative standpoint, some may be said to be nearly silent. The fact that many of the noises are due to different causes in different cars shows that many of these noises are unnecessary.

It appears that car noises may be classified as follows: Noises which probably cannot be entirely avoided without changing the principle upon which the present automobile is built, such as the clash of shifting gears; noises due to careless or imperfect design, due, for example, to improper muffling of the exhaust; noises due to the wear of parts after the car has been used for a considerable period of time, such as the rattles due to worn spring chuckles and brake rod connections.

Noises due to the first cause are very difficult to overcome. Anyone who has lived near a hill will admit that the constant noise from clashing gears is very annoying, but to entirely overcome this would probably call for a radical departure from our present method of power transmission to the rear wheels.

Even if a means of shifting gears was devised, which would be noiseless, there would still be the wine of the gears when the car was not operating on direct drive. This wining noise cannot be avoided, even when the gears are very carefully made, though it can be made less severe. The sliding gear transmission is undoubtedly one of the most imperfect units of the automobile, relatively speaking. At moderate speeds, no other unit of the car is responsible for so much noise, but at higher speeds engine noise also becomes objectional.

An engine has never yet been built which could be called quiet in the true sense of the word at high

speeds. This is in spite of the fact that much has been accomplished through lightening the reciprocating parts, giving more attention to the balancing of rotating and reciprocating parts and providing greater rigidity, especially in such places as the crankcase and crankshaft. It seems doubtful if the roar of an engine running at a very high speed, say 2,500 revolutions per minute, can ever be entirely overcome. The noise from a simple piece of machinery, like an emery wheel when running at this speed, is considerable. When one considers trying to make a complicated thing like a gasoline engine with all its reciprocating parts run quietly at this speed, the problem indeed seems difficult.

How much noise can be reduced by resorting to other types of valves than the poppet is an open question. At moderate speeds there is certainly little difference between a good poppet valve engine and a good sleeve-valve engine. At high speeds it might at first seem that the sleeve-valve engine should be quieter, but it must be remembered that at high speeds the reciprocating sleeves may set up vibration, resulting in noise. Theoretically, the rotary type of valve should possess many advantages from the standpoint of reducing valve noise to a minimum, but other troubles with this type appear to be difficult to surmount.

There are many other causes of noise in an engine running at a high speed. It must be remembered when an engine is turning 2,500 revolutions per minute many of the accessories, such as the generator, water pump and fan are running at much higher speeds. The roar of the air drawn through the radiator by the fan is considerable, yet we cannot cool an engine without air circulation. While it is doubtful if some of these noises can ever be overcome, much can be accomplished by muffling them. By making gear housings, crankcase, etc., of such material and in

(Continued on page 25)



# Profit in Lead Welding and Battery Repair\*

**S**ERVICE to customers is the rule of the day for the successful building of a profitable business. When such service not only attracts other business, but directly increases the profits of the plant, the advantage is obvious.

It is estimated that there are now 11,000,000 automobiles in use in this country. Repair of batteries for these cars is *profitable* service. No garage can afford to be unprepared to take care of this work. Every welding shop should also be equipped for it. The investment for the garage or welding shop in the necessary equipment is small and the profits of a few months will more than return the initial investment.

## GASES REQUIRED

There are a number of gases used for successfully doing the work; namely, acetylene mixed with oxygen; hydrogen mixed with oxygen, or city or natural gas mixed with oxygen. The acetylene, hydrogen and oxygen may be procured from local service stations in loaned cylinders at a low cost.

## FLAME ADJUSTMENT

The beginner should first practice obtaining the proper flame adjustment. Instead of using the neutral flame ordinarily used in welding, a carbonizing flame with a slight excess of the fuel gas (acetylene, hydrogen or city gas) should be used.

## HOLDING THE METAL

After the flame adjustment is obtained the next step is to practice building up lead, obtaining a complete fusion and at the same time preventing the metal from running away. The melting point of lead is about 650 degrees and it will take some practice in the beginning, particularly with the oxy-acetylene flame, which is quite hot, for the operator to be able to hold the metal. After this is accomplished the actual work of battery repair and lead welding is a comparatively simple matter.

## PREPARATION OF WORK

The most essential point to be kept in mind—always—is to be careful that there is no dirt on the metal to be welded, or between the layers of metal built up. All dirt and dust should be carefully removed by scraping or by brushing with a stiff wire brush. The presence of dirt on the surface being welded is liable to cause an insulated point which will prevent the proper functioning of the battery.

## REPLACEMENT OF TERMINALS

In replacing terminals the first thing to be done is to cut away and point the old post. The new terminal is then placed over the post; care being taken to set the terminal high enough from the cell top for wrench clearance. The flame is then applied to the terminal at the post top, melting this down to a round puddle. The terminal walls are melted before the puddle gets wide enough to reach the inside walls of the terminal and widening post puddle is melted or welded into the wall.

The first weld in the post is then allowed to cool. This is done to enable the welder to note how big the cavity is and to determine whether he has caught the walls of the terminal. The surface of the metal after cooling should be cleansed carefully with a stiff wire brush until it is bright and clean. More metal

is then added as shown in the figure by playing the torch first on the puddle and then on a lead stick held in the hand. It is essential that the lead stick and puddle in the cavity be kept at the same temperature in order to obtain complete fusion. The cavity is filled after adding in this manner several layers of lead. Enough lead is then added to round off the top and give the terminal a finished appearance. The work may then be tested by giving the terminal a sharp wrench with a pair of pliers and if the strap and element move with the impact it is an indication that the post and terminal are properly welded together.

Cell interconnectors are welded in the same way except that it is not necessary to keep the connectors as high above the cell or cover as in the case of terminals.

Besides battery repair, there are many other uses in a service station for a lead welding outfit. Welding, soldering and brazing of sheet metal such as steel, copper and lead can be done as well as the fusing of wires.

## Two New Closed Models Added to Packard Line

Two new closed models have been added to the single-six line by the Packard Motor Car Co., Detroit, a five-passenger sedan limousine at \$3,325 and a five-passenger coupe at \$3,350. Both are mounted on the 126 in. wheelbase chassis. With these the company has six closed models in the single-six line, four on the short chassis and two on the 133 in.

The new sedan limousine is similar to the seven-passenger sedan limousine, already included in the line, except for the shorter chassis. It is convertible from owner to chauffeur-driven by the raising or lowering of a glass partition between the front and rear compartment. The front compartment is upholstered in plain leather and the rear in gray leather cloth.

The new coupe sets three on its rear seat, which extends across the width of the car. It is fitted with a large trunk containing two suit cases and a hat box. Nickel bar fenders are fastened on the rear panel of the body.

## Assets of Empire Tire Bought for \$1,675,000

The assets of the Empire Tire & Rubber Corp., Trenton, N. J., were sold by the receivers at a public sale recently to Campbell, Heath & Co., of New York City, for \$1,675,000. It was stated that the purchasers will form a company to operate the plant, with C. Edward Murray, Jr., as head of the concern.

W. W. Pepper, a former president of the rubber company, is treasurer of the brokerage firm, while William H. Peck, president of the Third National Bank of Scranton, represented the firm in the bidding.

## Midwest Has Passenger Car Engines

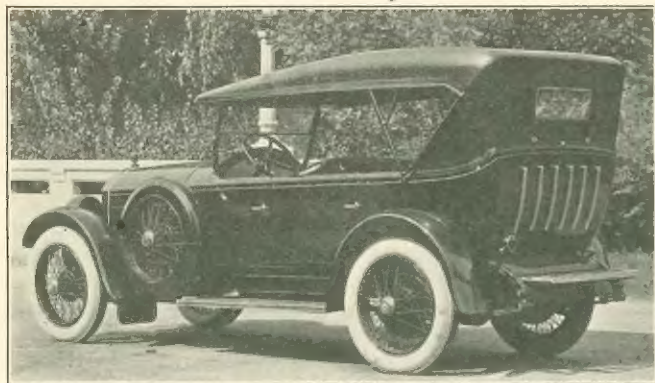
Three engines for passenger car service are now being manufactured by the Midwest Engine Co., Indianapolis. They are model "411," 3½ x 5, with thermo-siphon water circulation; model "412," same size but with water pump; and model "410," 3½ x 4½, with thermal circulation.

\*From *Sparks*, published by Bastian-Blessing Co.



# Many Refinements in New Cole Series

**M**ANY refinements, including a stronger frame, improved spring suspension, more efficient intake manifold and a new type of body termed "Etruscan," are included in the new Cole series Eight-Ninety. The frame is made of pressed steel, six inches deep and 2½ inches wide, with five cross members and two extra strong tie bars. On the rear cross member there is a heavy gusset plate which increases the rigidity. The steel is selected by metallurgical analyses and scientific tests. This new frame keeps the entire car, both body and



NEW COLE TOURING MODEL WITH ETRUSCAN BODY

chassis, in perfect alignment at all times, which gives absolute freedom from body squeaks and insures longer life to the chassis, it is claimed. The word "Ultramite," meaning "very strong metal," has been adopted as descriptive of this new frame.

The new Etruscan body has low sweeping lines of graceful contour, but this beauty has not been obtained at the sacrifice of durability and utility.

The wheel base remains at 127¼ inches, but the body has the appearance of being much lower than previous types, due, partially, to the black rounded molding at the lower edge of the bevel at the top of the body line. This molding extends from the radiator the full length of the car. Running parallel with the molding, about one inch below, is a thin white line which gives an additional touch of harmony and grace. The standard color is a rich Cole blue with black sheet metal parts and chassis. There is a ventilator in the cowl which gives a circulation of air into the driver's compartment. New drum headlights, 12 inches in diameter, with hand ground fluted lenses and adjustable lamp brackets and tie tube add to the beauty of the car. The lamps and brackets are black enamelled and mounted to the fenders by an unusually heavy tie bar which serves as a fender brace and lamp support. This construction prevents any rattling or weaving. On all models the spare wheels and tires are mounted on the sides.

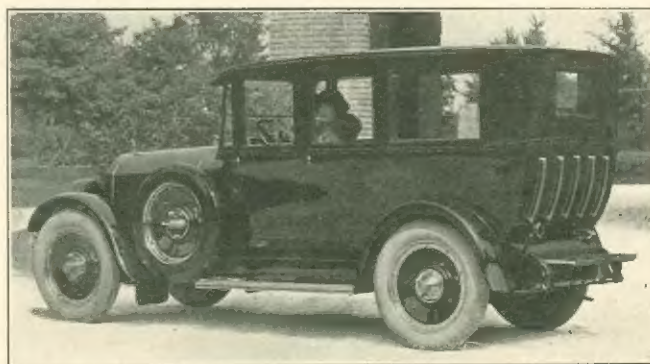
By thus placing the spare wheels—which each weigh 125 pounds with tires—near the car's center of gravity, the liability of skidding is greatly decreased, it is stated. The mounting irons are extra heavy and riveted directly to the frame. The individual steps have been entirely eliminated. In their place is a full three-quarter running board made entirely of aluminum covered with a rubber mat. It is mounted directly to the frame and rear fender in such a way that it forms a strong support to the fender. The fenders, aside from the change of design to harmonize with the Etruscan body, are twice as thick as formerly used. They are of 18 gauge metal and

mounted to the frame by two heavy irons, making it practically impossible for them to ever become loose.

With the exception of the new manifold, improved oiling system, and a few minor refinements, the motor remains unchanged. This is a special eight cylinder power plant built to Cole's specifications by Northway. It is of the "L" head type with cylinders cast 4 en block. The bore is 3½ in. and the stroke 4½ in., giving a piston displacement of 346.3 cubic inches and an S. A. E. rated horsepower of 39.22, although the engine will deliver 80 horsepower at 2800 r. p. m. Tests on the Speedway show a mileage of from 600 to 700 miles on a quart of oil, it is stated.

The new "envelope manifold" uses the exhaust to assist in the volatilization of the gas. This is done by completely surrounding the intake manifold with the exhaust manifold. The exhaust reaches a temperature of over 350 degrees in this chamber, which makes its action instantaneous and complete. Repeated tests on the Speedway at Indianapolis show that the results obtained are more than satisfactory. It is found that with this new manifold construction the engine operates much more smoothly; that all of the fuel goes into the combustion chamber in vapor form and, consequently, that the lubricating quality of the oil is not cut down by unexploded fluid gasoline passing downward around the piston rings into the crankcase and that it effects an increase of from 10 to 20 per cent in mileage, the company states.

The "hydro-cushion spring action," as it is termed by the maker, is a special Cole development which is claimed to greatly improve the riding quality by the scientific coordination of the spring action with positive, hydraulic rebound absorption. Lovejoy hydraulic shock absorbers are standard equipment on all Cole models. The springs are of the semi-elliptic type, 57½ inches in rear and 39 inches in



COLE ENCLOSED MODEL WITH ETRUSCAN BODY

front. These have been lengthened over last year's models and made lighter to get greater flexibility. Rubber spring bumpers are provided in both front and rear to prevent any metal to metal clashes on extreme rebound. These bumpers are made of tough, hard rubber and are mounted to the frame.

A new type "M" Gemmer steering gear with an all wood walnut steering wheel and friction type control has been adopted. This type is much heavier construction throughout with more bearing on the steering arm shaft, permitting easier steering. The

(Continued on page 25)



# Does Trade Paper Advertising Pay?\*

By FRANK M. COMRIE

**R**EGARDLESS of the superior quality of a product, or how exactly it meets the needs of many people—the manufacturer will soon go out of business, unless someone offers it for sale, and people buy it.

It has been said that anyone can manufacture—but that it takes a wise man to sell the product.

Nothing sells itself.

Everything must be sold.

That's why the dealer's goodwill is so important.

But every product must be sold to the dealer, before he can conscientiously sell it to his customers.

*There are only three ways of selling the dealer.*

First: You can send a salesman to tell him about your products, convince him of their superior merit, win his good-will. You can satisfy him so thoroughly, that he can sell your products and make money by doing so, that he will give your salesman an initial order.

Second: You can mail a letter, catalog, or circular, which tells the dealer what he wants to know about your products. *The mailman becomes your salesman.*

Third: You can insert an advertisement in the trade papers which the dealer reads, to tell him who you are, what you make, how much he will make if he sells your products, and why he should sell them.

A salesman is supposed to get orders.

A sales-letter is expected to bring back a reply.

A circular usually has a "return post card."

WHAT DO YOU GET FROM TRADE PAPER ADVERTISING?

Some manufacturers claim that they are unable to trace results directly to their trade paper advertising. They say that they receive but a small number of replies from their advertisements in trade papers, and are unable to prove conclusively whether trade paper advertising pays them or not.

It is obviously unfair, however, for any manufacturer to judge a trade paper by the number of inquiries he receives from his advertising—since one inquiry from a trade paper may result in more actual orders during the year than 10,000 inquiries from a publication of general circulation will produce.

A publication is merely a messenger, whether it is a newspaper—a trade paper—a farm journal—or a national magazine. It has nothing to sell but its services as a messenger.

A page of white space has no tangible value. It is not worth a cent, even though it may cost the advertiser \$10,000 for a single issue. It is only a messenger, and if the message which is printed on the page of white paper is an uninteresting one—why blame the messenger?

*The message is all important.*

ARE TRADE PAPERS READ?

When you consider that trade papers are read for business information; that they make a direct appeal to the selfish interest of their readers; and that in order to keep informed regarding changing conditions in any particular industry, or business, *trade papers must be read*—it is apparent that the trade papers offer manufacturers a medium for reaching prospective customers who, otherwise, can only be reached economically, by salesmen or through the mails.

Did you ever try to imagine what kind of an average man reads your trade paper advertisements, and ask yourself what you would say to him about your products if he were sitting at your desk? If you have not, try it

some time and have an imaginative talk with the readers of your trade paper advertisements. It may help you to make your trade paper advertisements more effective.

If a real, live salesman, who packs a heavy grip—a sample case and a portfolio of "sales helps," from town to town, were to walk into a dealer's store and repeat word for word the "sales talk" contained in some trade paper advertisements, the dealer would think that he was crazy and "run him out of town."

HOW DO YOU "TALK?"

Do your trade paper advertisements tell the message that you want to send to the dealers who sell your products?

Do your trade paper advertisements—talk as you would talk—if you were talking to these dealers in your own office?

Do they say what your salesmen say, when they open their sample cases—and try to get an order?

Are you talking to the dealers—through your advertisements—and using the same kind of sensible language that you would use if you were speaking with them "face to face"?

You should use the same common sense in your trade paper advertisements that you would use in talking to a dealer in your office; give real facts about your products; convincing reasons why dealers can, and should, sell them straightforward talk about your co-operation and sales help.

*Make your advertisements talk!* Every advertisement is a message. Say something! The best advertisement is the one that says what you would say—to a dealer if you were talking to him in your own office.

But don't say too much. Other people are not so keenly interested in your business as you are. *Men read trade papers for business information—because they must—and not for recreation.* They are frequently read during business hours, therefore your advertisements should be concise and easy to read.

Dealers are in business to make money. *They are merchants who prosper by buying for re-sale at a profit—and do not play favorites.* If you offer them good values at terms on which they can make a good profit, they are just as willing to sell your merchandise as that of any other manufacturer.

*A good profit and a quick turnover make the strongest possible appeal to the average dealer.*

No inflexible rules can be applied to trade paper advertising. Publications in different industries require different treatment. Experience is the only guide. Advertising is one of the things you cannot tell someone else how to do.

SELECTING TRADE PAPERS

In planning your trade paper advertising, select only the best trade papers in your line, and use them liberally. Don't use the doubtful trade papers at all, and don't skimp your space in the good trade papers. More failures in trade paper advertising are due to the use of small advertisements than to any other one cause.

Shrewd manufacturers who would not buy \$100 worth of merchandise, without knowing that they received exactly what they bought, before paying for it, sometimes buy imaginary trade paper circulation from which they receive only imaginary results.

In no other branch of the publishing business is there so great an incentive for the unscrupulous publisher as in that of the trade paper. The pathway of the legiti-

\*This article, which has been published in the form of a booklet by the Frank M. Comrie Co., is such a perfect analysis of the trade paper that it was deemed worthy of reproduction in somewhat condensed form.



mate publisher has been strewn with thorns by unscrupulous publishers of trade papers, who pander to the vanity and conceit of manufacturers and issue publications filled with glowing encomiums and autobiographical articles, profusely illustrated with portraits and cuts of the plant—which nobody reads, but for which liberal compensation is paid.

In placing trade paper advertising, therefore, it is most important that the messenger which is to carry your message shall be a reliable one.

The value of consistent trade paper advertising, sensibly written, and placed in dependable trade papers is beyond question, but the advertisements should be prepared even more carefully than the advertisements for large national publications, *because they appeal to a more critical audience.*

#### DO NOT EXPECT IMMEDIATE RESULTS

Do not delude yourself! Dealers do not sit up all night reading trade paper advertisements, nor wait until after midnight to telephone in their orders at reduced telephone rates.

A certain advertiser who used both trade papers and general publications, found that the trade papers brought him very few inquiries, but that he received a large number of replies from his national advertising. During the course of the year, however, he received one large order from his trade paper advertising that amounted to more than the total orders received from his national advertising. It took time to get the order, but it was a profitable one when it arrived.

An automobile accessory manufacturer received an inquiry from one of his advertisements in an automobile trade publication. It was from a garage in California. After considerable correspondence the garage man placed an initial order for one hundred dollars. The sales records show, however, that this California garage developed into a steady customer, and has sent the factory repeat orders of approximately \$2,500 a year, during the past five years. This one inquiry, therefore, from an automobile trade paper, has actually produced \$12,600 in actual orders over a period of five years.

One thousand such inquiries would bring a total volume of sales of \$2,500,000 annually—from one thousand customers of that kind.

#### THE VALUE OF AN INQUIRY

It is utterly impossible for anyone to judge the value of an inquiry. The most intensive "follow up" may only result in a small initial order, but the dealer who places the smallest initial order may develop into the largest customer on the books.

*Too many manufacturers use a telescope—instead of a microscope—when they go looking for business. They study the map of California and Maine, but forget all about the dealers right near home—close to the factory, to whom they can make quick deliveries.*

It is obvious that if the sales of 1,000 dealers average \$100 a year, the total volume of business done will be \$100,000.

It is just as apparent that if the average sales of 1,000 dealers can be developed to \$1,000 a year, the total volume of business done will be \$1,000,000.

If you can get 10,000 dealers whose average sales are \$1,000 a year, the total volume will be \$10,000,000.

But few manufacturers realize the value of the dealer's good-will. It's the biggest asset of any business.

Salesmen, distributors, jobbers, catalogs, circulars, sales letters, house organs, etc., all endeavor to sell to the dealer. They all want to sell him something.

But the dealer must pay for the merchandise—and then re-sell it to his customers, before the sale is actually made, and he is able to show a profit on the transaction.

The peculiar tendency on the part of manufacturers

to study the map of the United States with a telescope, instead of studying the needs of their own customers, and by intelligent, sensible co-operation developing them into larger customers, has been the cause of more advertising failures in trade papers, national advertising, newspaper advertising, farm paper advertising, and all other kinds of advertising, than all other causes put together.

Intensive co-operation with the customers which you now have, and intelligent development of the new customers who answer your trade paper advertisements will result in a more rapid growth of your business, larger profits, and greater success.

An inquiry may be but the first link in a long chain of steady sales to a satisfied customer, and it should be answered promptly and intelligently.

#### THE RESULT OF ONE INQUIRY FROM A JOBBER

Last year a manufacturer of automotive equipment ran an advertisement in one of the automobile trade publications. He received a reply from one of the largest jobbers in the United States, from whom his salesmen had tried to get an order for more than three years.

The manufacturer had bombarded the jobber with correspondence and his salesmen had called on him frequently, but for some reason or other he was unable, either through personal salesmanship or correspondence, to interest this particular jobber in his products.

His advertisement, however, brought "a voluntary inquiry" from this jobber, and he has since developed into a very large buyer of the manufacturer's products.

Why this business connection was established through an advertisement, rather than as the result of the calls of salesmen or correspondence from the factory, it is impossible to say. It is obvious, however, that the advertisement was a very profitable one for the manufacturer, since it brought him at least one very large customer.

#### WHAT CAUSES FAILURES?

Some time ago a manufacturer ran a page advertisement in a leading trade publication, and was very much disappointed because he did not receive a single reply. So was the publisher of the paper! The representative of the publication also was very sorrowful, because the manufacturer refused to continue his advertising. Everyone was disappointed.

The publisher knew that he had a good paper. The representative knew that it had a large circulation. The manufacturer had a good product, and could not understand why he did not receive any replies. The attractive page advertisement, which had cost him more than \$200 an issue, did not bring anything—but an invoice for the cost of the advertisement. That was the only tangible result.

A careful study of the advertisement itself gave the reason. *It did not ask for a reply!*

Many manufacturers entrust this very important matter of writing trade paper advertising to an inexperienced assistant, or satisfied of their own omniscience, write it themselves. When they spend money to publish the work of an inexperienced writer they usually make a mistake *for which they pay twice*, while the manufacturer who writes his own advertisement is in the same fix as the lawyer who tries his own law suit—he is handicapped by his own modesty.

#### THE DEALER'S "FIX"

A dealer must have customers and sell merchandise or he will very soon go out of business. His customers' good-will represents his best asset.

His endorsement of a product is frequently more influential than the manufacturer's guarantee, because his customers know him well and have faith in him.

It is obvious therefore that every dealer must be "on guard" against slick salesmen and insidious advertising.

The manufacturer who sends out high-powered salesmen to "go-get-'em." without a well planned merchandis-



ing campaign that will help dealers move his products is building on sand.

When a manufacturer advertises his products in trade publications he is fishing for two things—first: an order, and second: the endorsement of the dealer who sends the order.

*But the endorsement is more valuable than the order.*

The manufacturer who sends out salesmen to tell dealers that he is just about to start a large advertising campaign, and "blows his horn" in trade papers about his large "National Advertising Campaign," and then fails to make his promise good, is just a plain faker—a cheap cheat.

Every dealer has had ample experience with that sort of salesmanship, and that kind of national advertising campaign. It is not surprising that they are "a wee bit careful," and have joined the "Show-Me-Club."

#### ABOUT CONFIDENCE MEN

There are two kinds of confidence men. There is the manufacturer who advertises his products in trade papers, sends out a salesman and when he has won the confidence of the dealer and obtained his order, treats him "on the square," delivers exactly what he promises to deliver, and makes good on his promises of advertising, sales helps, window displays, etc., to help the dealer sell the merchandise that he has purchased.

Then there is the manufacturer who sends out his salesmen with a beautiful line of talk about his products, and the wonderful amount of advertising that will be done to reach the consumers, but who fills the dealer's order with merchandise that is of inferior quality, and then fails to make good the promises of his salesmen—who are his representatives.

Dealers have bought so many "gold bricks" that they are amply justified in being careful about what they buy and in discounting the glowing orations of salesmen about their products and advertising campaign.

*The confidence man who sells a "gold brick" is not, after all, very much worse than the manufacturer who sends out salesmen to cheat the dealers and then breaks all the promises that they make.*

*Dealers don't "work for you."* The retail dealer is in business for himself and isn't under any particular obligation to sell your products, unless it is to his advantage.

If you manufacture a reliable product—it's up to you to create a demand for it—not up to the dealer.

There is no reason why you should expect the dealer to spend his money to advertise your products unless you can show him that he can make a profit by doing so.

Many manufacturers seem to be under the impression that they are doing the dealers a favor when they permit them to sell their products, forgetting that dealers are their customers, and that a business, after all, built by customers, just as a building is built by bricks. One customer may not be of very great importance to the success of any business, yet without customers no business can exist.

#### AN AMAZING FACT

One of the greatest of all the mysteries is why manufacturers devote so little effort to the cultivation of the confidence and good-will of their customers.

We do business with our friends, therefore the most important factor in connection with any business is to cultivate the friendship of its customers.

It is an amazing fact, however, that when a dealer makes an inquiry from a manufacturer regarding his products the important duty of giving an intelligent reply to that inquiry is frequently turned over to a clerk, who perhaps sends out a form letter or a series of follow-up form letters, none of which may give the definite information that the dealer requested.

Any manufacturer who will take a couple of weeks of his valuable time—make a trip to call on his customers himself—and then return to his office fresh from direct contact with the problems which confront his customers, and investigate the way in which the correspondence with dealers is handled in his own office, will perhaps be amazed at its inefficiency.

#### BAD BUSINESS METHODS

Routine correspondence that is either too short and snappy, or perhaps arrogant to the point where it verges on the border of insolence, when it is addressed to a customer, does not promote the growth of any business.

The quickest way to build any business is to make an analysis of the requirements of the customers which it already has, and by persistent, intelligent co-operation, develop them into larger customers.

When a dealer reads your advertisement in a trade paper, and answers it, he is justified in expecting a prompt, courteous, intelligent reply, instead of a poorly written, filled-in form letter that does not give him the information he wants.

He is just as busy as you are, in his way, but some manufacturers seem to assume that dealers answer advertisement just for the fun of it. If they would spend a couple of weeks calling on prospective customers, however, they would quickly get an entirely different impression.

#### THE CO-ORDINATION OF TRADE PAPER AND "DIRECT BY MAIL" ADVERTISING

Trade paper advertising can be supplemented very effectively with direct by mail broadsides, and when that is done each will help to make the other more effective, and more productive.

If a dealer sees your advertisement in a trade paper, it makes an impression. If he gets a good sales letter, circular or broadside a few days later, it acts as a reminder and may lead to an inquiry for further information about your products.

These two methods—the use of trade papers, supplemented by intelligently prepared direct by mail advertising, can be made very effective for obtaining dealer distribution and good-will.

*The customers you now have are your business.* The development of these customers into larger customers, and the addition of new customers, means growth, a larger volume of business, and increased profits.

#### Earl B. Stone Joins Hoyt's Service, Inc.

Earl B. Stone has joined the advertising staff of Hoyt's Service, Inc., at Cleveland. Mr. Stone has had nine years of sales and advertising experience. He has spent the last three and one-half years with the Cleveland Tractor Co., his last office being advertising manager of the company.

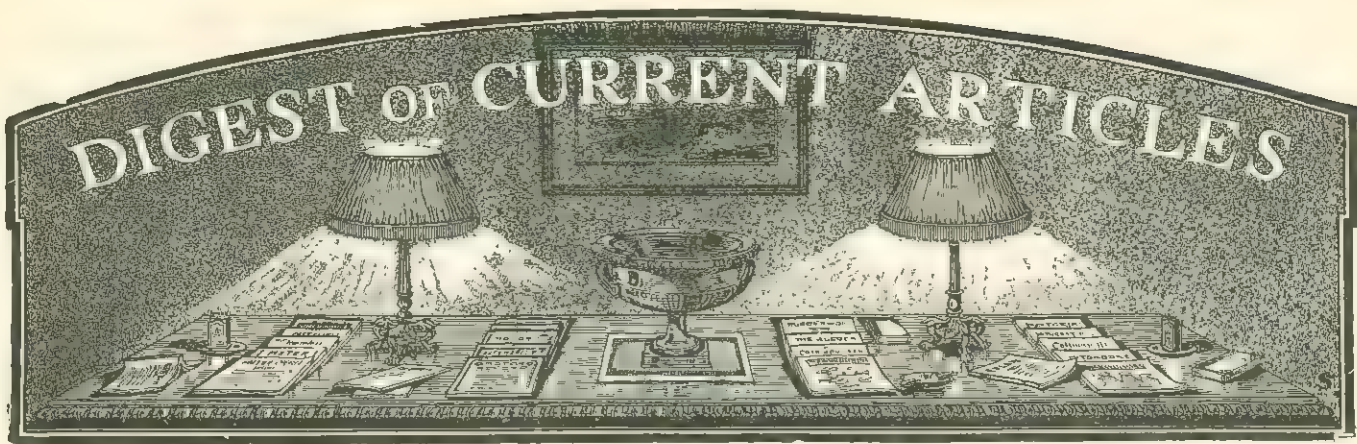
#### Receivers Named for Comet Plant

Receivers have been named for the Comet Automobile Co., Decatur, Ill., by Judge Baldwin, to avert foreclosure proceedings against the property, in behalf of the Citizens National Bank and the Farmers State Bank & Trust Co., of Decatur.

#### Maxwell Now Has Three-Bearing Crankshaft

Maxwell cars are now coming through with three instead of two bearing crankshafts. The shaft is drilled to provide force feed lubrication to all bearings. The front and rear bearings are 1 7/8 in. in diameter and the center 2 1/4 in. The total length of these three bearings comprise about one-third of the active length of the shaft.





THE qualities which make a successful salesman are discussed by Ralph Barstow in an article appearing in a recent issue of the *Automobile Trade Journal* entitled "What Qualities Make Successful Salesmen." In discussing what fundamentals the salesman must have he says in part:

"While we all take for granted so common a quality as Work it gets overlooked all the time. Like one's teeth, the idea of application to the job must be brushed up every so often for you can't sell anything without being on the job and trying.

"Another common quality that is sometimes neglected is Honesty. In the long run, the crooked salesman gets canned and his employer carries the bag. Persistence is another simple little thing that needs continual renewing. We say, 'Gee, that man will never buy a car,' and don't call, and the 'Complex Six' man sells him the week after.

"Let's get a line on some of the less taken-for-granted qualities that are common to all salesmen. Foremost is the matter of Self-Confidence. You'll say it gives a man a 'swelled head,' and I'll admit it, but better have a swelled head and get the business than not have it and not sell. Someone will come along and reduce the swelling! As a matter of experience, the self-esteem is a real necessity to offset the knocks and poor treatment we salesmen receive almost every day. If a man believed that he was bad as he is treated he would never sell anything. He's got to be able to say to himself (and believe it), 'Well, I'm a whole lot better man than you are in some things. I'll show you yet that I can sell you, you crab.' That looks childish in print, but it is the substance of what we have to tell ourselves every little while and then we have to make good on it."

Among the other qualities mentioned in the article which the successful salesman should possess are expressiveness, observation and perception, and insight.

"A GOOD many automobile dealers are still distressed over the fact that their own profit margins from sales have not kept pace with increasing costs of doing business; at a time when they are expected to spend more in maintaining their businesses than ever before, they find their incomes decreasing, save where they are able to sell many more cars than ever before," says *Automobile Topics*. "With some of them the complaint has become chronic, while with others it is based on logical reasoning.

"The manufacturer's point of view is that his dealers must go on selling more cars, as otherwise his own business cannot go on growing, and if it fail to grow then it is virtually on the decline. Hence, any policy that, while giving the customer more for his money,

also requires greater activity on the retailer's part is a good policy to pursue.

"But this may be overdone. The tendency, already noticeable, is for the enhancement of a limited number of already great and successful dealers, and the multiplication of minor associate dealers, who owe no allegiance to the Factory, but only to the distributor. Looking ahead four or five years, when conditions will be even more strained, as far as competition goes, than they are today, may it not be that a condition will be found wherein the big dealer may be possessed of more power than is good for him?

"No one can tell. At present, the urge is for dealers who can be depended upon; who will run their businesses with a minimum of reliance on the manufacturer who will work the market for all it is worth and above all else hold the line against competition. An industry distributing its product through a limited list of large and powerful wholesalers might be better off than an industry having its outlets in thousands of direct dealers. There are many advantages to be counted on both sides. But are the advantages being counted, or is the industry rushing blindly onward?"

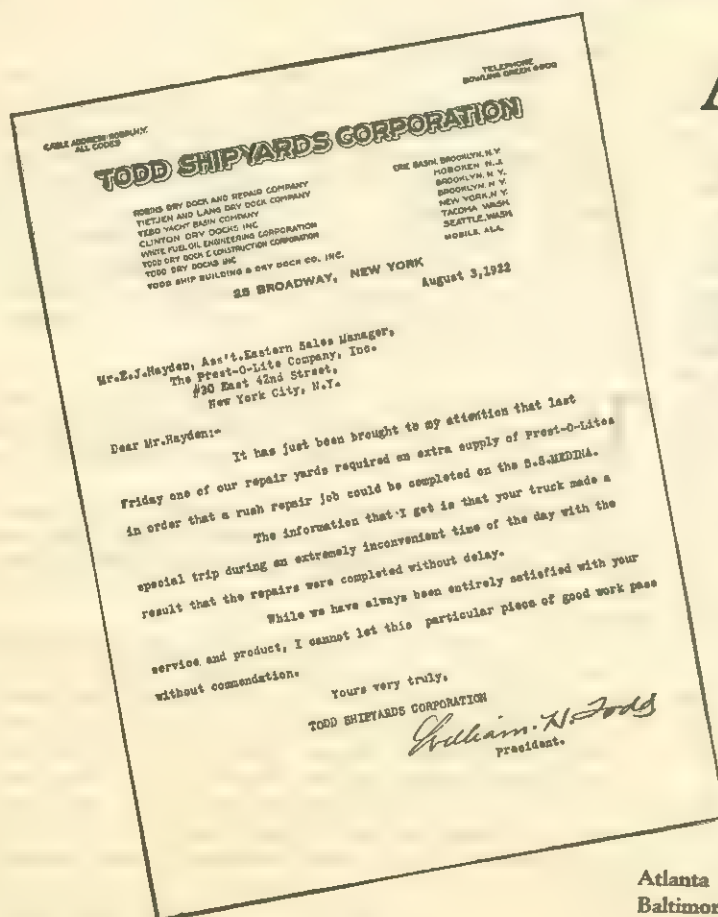
TO sell equipment it must be properly displayed. This point is brought out in the following editorial appearing in a recent issue of the *Commercial Car Journal*:

"Any dealer who contemplates handling truck equipment must, from the very beginning, realize that such equipment will not sell itself. It must be merchandised, displayed and advertised the same as any other commodity.

"So many automotive merchants seem to think that as long as they throw a lot of packages on a few shelves and stick up a few advertising signs around their place, that they are selling equipment. This brings to mind a sub-dealer's establishment, located on a prominent automobile thoroughfare in Philadelphia. This sub-dealer handles a well-known passenger car and truck chassis. Although he hasn't much room—it wasn't that which struck the writer—but the messy looking appearance of the accessory and equipment display. Along side of the entrance close to the front, he erected about two dozen shelves against the wall, and on these shelves the equipment lay. Practically \$2,500 worth of material was literally dumped on these shelves. There was no systematic arrangement. But the worst of all was the soiled appearance of the packages. They looked as if some mechanic had made it his daily duty to faithfully smear greasy hands over every package on those shelves. The condition of those packages alone would be enough to keep any owner from buying. Is it any wonder that

(Continued on page 25)





## A RUSH JOB

Prest-O-Lite's unrivalled service fully cares for the steady demand or the emergency need.

Fifty-four plants and warehouses, linked together, provide the necessary flexibility.

*Each Prest-O-Lite user looks, to his nearest District Sales Office, not merely for arrangements to adequately cover acetylene needs, but for helpful co-operation and advice on any matter involved in the use of acetylene.*

## Prest-O-Lite

DISSOLVED ACETYLENE

### DISTRICT SALES OFFICES

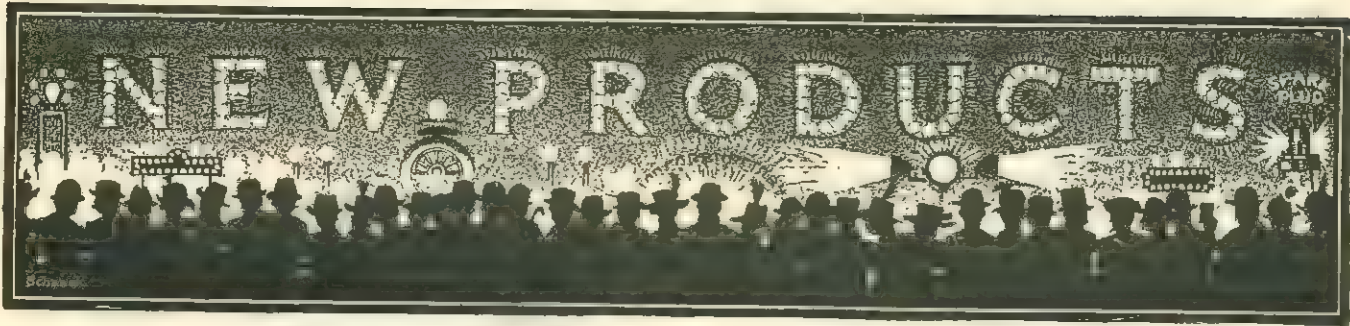
Atlanta	Buffalo	Dallas	Milwaukee	Pittsburgh
Baltimore	Chicago	Detroit	New York	St. Louis
Boston	Cleveland	Kansas City	Philadelphia	San Francisco

THE PREST-O-LITE COMPANY, INC.

General Offices: Carbide and Carbon Building, 30 East 42nd Street, New York.

Balfour Building, San Francisco; In Canada: Prest-O-Lite Company of Canada, Limited, Toronto





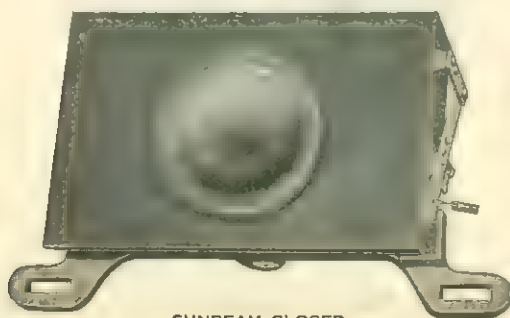
### Sunbeam Warning Signal

A stop signal, tail light and license plate holder are combined in the Sunbeam warning signal manufactured by the M. & M. Products Co., Rock Island,



SUNBEAM OPEN

Ill. The tail light lens is carried in a hinged cover, as will be seen from the accompanying illustration. Normally the cover is down so that the device prevents the appearance of an ordinary tail light, but as soon as the brakes are applied the cover is raised revealing a large lense with the word "stop" upon it. The signal is operated by a cable which is attached to a hinged arm screwed under the floor board to which is attached a cable from the brake lever or rod. An advantage of the device is that the



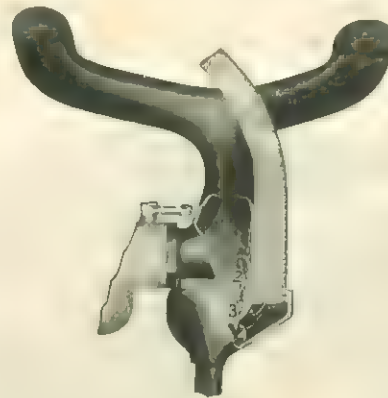
SUNBEAM CLOSED

"stop" lens is protected from dirt when not in use.

L-M Axle Co. has purchased the plant of the Jones Gear Co. at Cleveland for \$500,000. The gear company went into bankruptcy some time ago, and the axle company has been producing its products in the building that it has just purchased, having leased it from the receiver.

### "Gas Stew Pot"

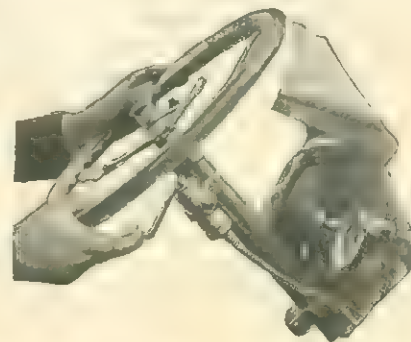
A device for overcoming the difficulties of low test gasoline called the "Gas Stew Pot" has been placed on the market by the W. G. Engineering Co., East Moline, Ill. The device heats only the heavy



ends of the gas which need the heat, allowing the gas vapors to be drawn into the cylinders unmolested. The heavy gas, forming in drops, runs into the "Stew Pot" where it is vaporized by heat, after which it is drawn into the cylinder, where it mixes with the other gas—thus forming a comparatively cool highly explosive mixture, it is claimed.

### Universal Headlight Controller

The universal headlight controller makes it possible for the driver to gradually dim the headlights,



thereby eliminating the danger of abrupt dimming which always plunges the road into complete darkness while the eyes are adjusting themselves to the sudden change.

The controller can be installed on any steering-post in a few minutes and is so located that the controlling lever is operated by a gentle pressure of the finger without removing the hand from the steering



wheel. To dim the lights the driver simply pushes the lever forward. The further he pushes it the dimmer the lights become.

The wiring attachment is simple. One control wire is attached to the switch, the other to the bright headlight wire, which has previously been disconnected. The controller and wire conduit are nickel plated and polished.

This controller is manufactured by the Universal Headlight Controller Co., Fisk Building, New York, N. Y.

#### Aske Electric Fuelizer for Ford Car

The Kase Electric Co., of Duluth, Minn., which for the past year and a half has been marketing the Aske electric vaporizer for all makes of cars, has now developed an electric fuelizer designed especially for the Ford car.

The new model consists of a cast-iron manifold, with a chamber formed in the gas passage for the reception of the heating element, which is shown in the illustration.



The Aske electric fuelizer is designed to overcome motor starting troubles by electrically pre-heating the gasoline mixture.

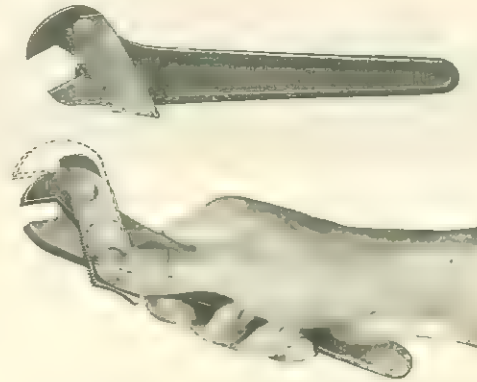
In addition to giving instant engine starting, it is declared that the fuelizer has equal value in giving increased mileage per gallon of gasoline. This is brought about by the breaking-up effect of the fuelizer grids on the gasoline spray, which acts like a mixing chamber in reatomizing the gasoline.

#### Gellman Adjustable End Wrench

To meet the demand for an end wrench that can be adjusted instantly and will stay adjusted the Gellman Wrench Corp., Chamber of Commerce Bldg., Chicago, Ill., has brought out the Gellman adjustable end wrench.

The screw is eliminated from this wrench, which at the same time eliminates bulkiness in the head. From the illustration, it will be noted that the handle member forms the lower jaw and is notched at right angles to the gripping face, while the movable upper jaw is also notched and can be moved up or down when the notches are pulled out of engagement. Simply by pressing with the thumb (of the hand holding the wrench) on the corrugated part of the

movable jaw, and disengaging, the upper jaw will move instantly up or down, without any friction, to the adjustment desired. The wrench can be used in any direction desired.

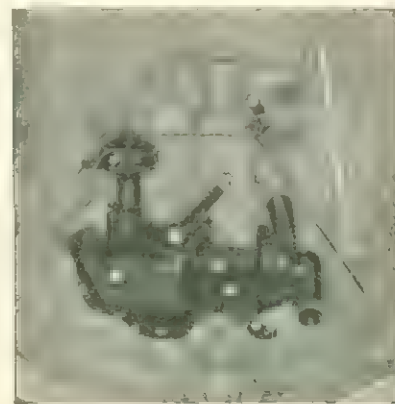


The wrench is drop forged from high grade steel and hardened by a carbonizing process. It is manufactured in 6, 9 and 12-inch sizes, weighing, respectively, 4, 10 and 20 ounces.

#### "Three In One Unit"

An accessible elevated timing system, a force-feed gear oil pump, and a gear-driven water circulating pump are combined in the "Three-in-One Unit" for the Ford car, manufactured by the Hexagon Specialty Mfg. Co., 3630 South Grand Ave., St. Louis, Mo. The timer is of the oilless wipe contact type and is in a position which makes it easy to get at and prevents the wires from becoming oil-soaked.

The oil pump insures an ample supply of oil when the car is going up-grade and because of the pressure developed prevents the danger of clogging of the feed pipe with lint from the brake bands. The pump also discharges oil through a drilled passage opening directly over the gears which drive the unit, thereby insuring proper lubrication.



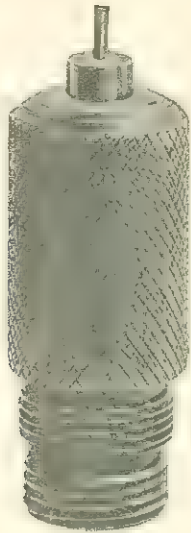
The water pump, being gear driven, is positive in action as there is no belt to slip. The standard hose connection is used. The gears of the unit are carbonized and hardened, and the shafts hardened and ground.

#### Sauer's Engine Time Indicator

Sauer's engine time indicator enables the repairman to check up the timing of the ignition and valves in about three minutes, it is claimed. The indicator is screwed



into the opening usually occupied by the spark plug. By cranking the engine slowly by hand it is possible with this instrument to quickly determine the power stroke,

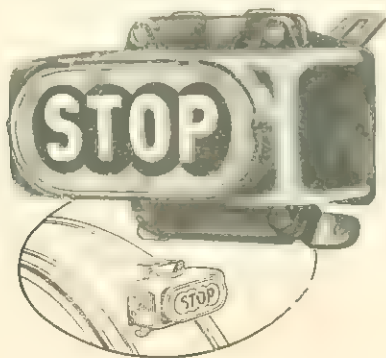


dead center and compression stroke. It is made by Sauer Bros., 4th and Main Streets, Chico, Cal.

#### Ensign Stop Signal

The action of inertia due to the arrested momentum of the car is used to operate the Ensign stop signal, manufactured by the Spergler-Loomis Mfg. Co., 58 East Washington St., Chicago, Ill.

The signal operates automatically when the car slows down. Any slowing movement, slight or pronounced, flashes the signal. The current is automatically cut off and the light disappears when the car comes to a stop, or at the instant it picks up speed or discontinues the slowing movement. The action is automatic, depending entirely upon the movement of the car itself, and the instant at which the signal flashes or is cut off, is always the same.



It is claimed that this signal will work equally well at very low or very high speeds and no matter whether the car is going up or down hill.

Lightness has been aimed at in the design, the frame being made of cast aluminum. The reflector is silver-plated to give greater reflecting power. The signal is furnished in black enamel, baked on.

Diamond Chain & Manufacturing Co. has opened an office in the Leader-News building, Cleveland, in charge of H. I. Markey who has been with the company for five years as mechanical engineer in the engineering and sales departments.

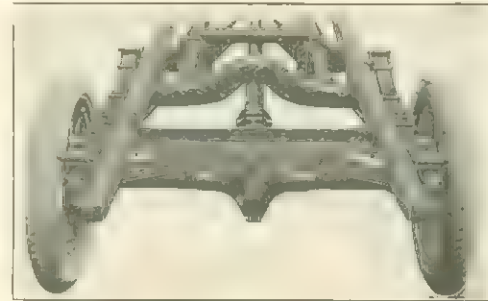
#### "U-Neek" Storage Battery

"U-Neek" storage batteries for both automotive and radio service are being manufactured by the Unique Storage Battery Co., Buffalo, N. Y. The batteries are designed by Charles F. Hunz, a well known battery engineer. The separators are made of Port Oxford cedar and the plates are built with interior locked bars which insure proper contact and retention of the active material.

#### RYD-E-Z Springs for Ford Truck

The accompanying illustration shows a rear view of a set of RYD-E-Z springs attached to a Ford truck.

RYD-E-Z springs provide platform spring suspension similar to that used on many passenger cars. They consist of three springs, 42 inches long; total, 126 inches, suspended on patented supports on each side and across the rear, giving  $7\frac{1}{2}$  feet of additional resiliency over the original Ford springs. The front and rear hangers distribute the load  $21\frac{1}{2}$  inches, each forward and backward from the differential, thereby decreasing the wear and tear on the member. The front spring hanger also strengthens the chassis and



prevents its buckling or twisting. The rear hanger supports the body rails and takes care of the load that overhangs the chassis, thereby reducing the danger of bent and broken rails to a minimum.

RYD-E-Z springs are made by the RYD-E-Z Spring Co., Cleves, Hamilton County, Ohio.

#### Miller Engine Being Built for Next Indianapolis Race

Harry Miller, well known builder of racing cars, has under construction at his plant in Los Angeles the first of two 122-cubic inch displacement engines which he expects to enter in the 1923 race at Indianapolis. The new engines will have eight cylinders all in line.

The chassis that will carry the Miller engines will have a wheelbase of 104 in. The front will be narrow and the body will be only 27 in. wide, accommodating a driver only. The bore of the cylinders will be  $2\frac{11}{32}$  in. with a stroke of approximately  $3\frac{1}{2}$  in. Although the parts will be smaller, the motor will be similar in design to that which Jimmy Murphy has used in his car this season.

The entire car will weigh about 1,400 lbs. and the power plant is expected to develop from 90 to 95 horsepower. With the exception of the wheels, tires and electric units, the cars will be built complete in Miller's shop.

Reports by the Maxwell Motor Corp. show that the closed car output is running 50 per cent of total production. From present schedules it is very likely that the company will reach its estimate of 56,000 cars as the total output for the year.





## TRADE GOSSIP



William Elliott Phelps has been appointed general sales manager for the Barley Motor Car Co. Until Aug. 1 he served as general sales manager of the Haynes Automobile Co.

F. D. Schulte has resigned as body engineer and designer of the Stephens Motor Car Co., Freeport, Ill. He will take a three or four months' vacation trip to Europe. His plans after he returns home have not been announced.

S. M. Williams, who for several years was in charge of the work of the Federal Highway Council in Washington, D. C., and who joined the Autocar Co., Ardmore, Pa., when the Federal Highway Council was abandoned, has been appointed manager of the company's New York City branch.

A. M. Lindsley, engineer with the Alvard Reamer & Tool Co., Millersburg, Pa., has been placed in charge of the advertising department of that company. He will continue his work as engineer. Lindsley was formerly identified with the Cincinnati Milling Machine Co. of Cincinnati.

A. W. Robbins, formerly of the Standard Roller Bearing Co. and the Bearings Service Co., now is associated with the Bearings Co. of America, and will travel from the Detroit offices of that concern.

Robert C. Yates, for many years identified with the Union Drop Forge Co. of Chicago, has resigned to become general manager of the Interstate Drop Forge Co. of Milwaukee.

B. G. Brennan has been appointed general sales manager of the Inland Products Co., manufacturer of the Inland Spiral-Cut and Oilless piston rings.

Ralph C. Chestnutt has been appointed chief engineer of the Templar Motors Co. at Cleveland.

Frank Talbott, who was formerly general manager of the Victor Rubber Co., has been appointed general manager of the Virginia Rubber Co., with headquarters at Charleston, W. Va. Since leaving the Victor, Talbott has been directing the manufacture and sales end of a new tire he has invented. It is announced that the tire will be manufactured at the Virginia plant instead of at Cleveland.

J. M. Dixon and N. E. Oliver have been appointed directors of the Quaker City Rubber Co., Philadelphia. Dixon is president of the Tobacco Products Co. and a director in other corporations. Oliver, who has been identified with the rubber industry for 25 years, was formerly associated as a director with the Diamond Rubber Co. and later became general manager of the B. F. Goodrich Co. of New York.

Victor M. Denis has resigned from the position of sales manager of the Hoag-Winter Auto Co., Arvern, N. Y. He expects to become affiliated with a competitive concern.

W. G. Booth, who for the past year has been the leading salesman in the Detroit office of the Grier Battery Supply Co., has been appointed branch manager of the Cleveland office. Mr. Grier, who opened this office and has been in charge up to the present time, has returned to Detroit.

A. F. Bassett has been appointed assistant sales manager of the motor bearings division of the Hyatt Roller Bearing Co. Mr. Bassett, a graduate of Yale-Sheffield school, brings to this division several years of combined sales and engineering experience with other divisions of this company. Previous to his new appointment he was sales engineer for the Detroit territory.

Stewart McDonald, president of the Moon Motor Car Co., has been elected a director of the St. Louis Chamber of Commerce.

Clayton W. Buterfield has been appointed manager of sale of the new Owen-Dyneto Electric Corp., Syracuse, N. Y. This is the first appointment announced since the purchase several weeks ago of the Dyneto Electric Corp. by Ralph M. Owen.

Del Lang and Joseph Pender have joined the sales force of the Weaver Mfg. Co. For the past five years Lang has been with the Champion Spark Plug Co. Pender was formerly with the United States Steel Products Co.

F. Earl Richardson, for 10 years a leading figure in Cleveland retail and wholesale motor car circles, has been elected as president and general manager of the Avenue Motor Co., Maxwell-Chalmers dealers in Cleveland.

O. P. Robb has been appointed vice-president and sales manager of the Stephens Motor Car Co. For a number of years Mr. Robb has been a successful sales executive for the Moline Plow Co.

James F. Boyd, formerly manager of the Willys-Overland branch at Spokane, Washington, has been appointed branch manager at Indianapolis to succeed G. V. Orr, who resigned to become associated with the Willys-Overland distributor in the State of Iowa.

John P. Dods, for years associated with the Automobile Blue Book Publishing Co., has been appointed general manager of the Brightman Manufacturing Co., South Columbus, Ohio.



# MOTOR RECORD

PUBLISHED MONTHLY AT THE WEST STREET BUILDING,  
90 West Street, New York, by

THE FERGUSON PUBLISHING CO.

President, ARTHUR D. FERGUSON,  
Sec. and Treas., A. L. CONLEY,  
Managing Editor, H. S. D. FERGUSON,  
Editor, EDWARD G. INGRAM.

Telephone, Rector 5187.

Chicago Office, 20 E. Jackson Blvd., Telephone, Wash-  
bash, 5212; Cleveland office, R. A. McCarthy, Hollenden  
Hotel.

Indianapolis representative, Norman B. Lavers, 4212  
Winthrop Ave. Telephone, Washington 4527.

## SUBSCRIPTION RATES

In the United States and its Possessions, \$3 a year.  
Single Copies, 35 cents. Canada, Mexico, and Other  
Foreign Countries, \$5 a year U. S. Money.

Entered as Second Class Matter, July 17, 1917, at the  
Post Office at New York, New York, under the Act of  
March 3, 1879.

## NOTICE TO ADVERTISERS

Insertion of new advertisements or change of copy  
cannot be guaranteed if received later than the 25th of  
the month preceding the date of publication.

**N**O legal contract can be binding unless there has  
been a "meeting of minds," as it is commonly  
called. A common language makes this possible, but  
unless care is taken to be specific, confusion may even  
then arise.

In 1916, the Society of Automotive Engineers pre-  
pared, in co-operation with engineers and representatives  
of service departments of automobile companies, a list  
of standard names for the common automobile parts, in  
order to eliminate confusion that existed due to the  
promiscuous naming of parts which had developed in  
the early growth of the industry.

The standard nomenclature was approved by the So-  
ciety members and largely followed by service man-  
agers in making up parts' lists. This has resulted in  
saving a surprising amount of time and money in the  
definite and prompt making and filling of orders for  
parts. Certain names, the use of which was recom-  
mended in the nomenclature, were, however, not adopted  
as generally as might be desired, probably the most  
important of these being the term "engine" for desig-  
nating an internal combustion unit of the most prevalent  
type of automobile, the word "motor" being used to a  
certain extent instead.

"Motor" is the correct name for an electric unit used  
for changing electrical into mechanical energy, and its  
meaning as applied to internal-combustion engines can  
be understood only by the context. An electric *motor*

is commonly used on gasoline automobiles in connection  
with the starting apparatus.

The continued misuse of the word "motor" is prob-  
ably due to two factors. It is used, and, correctly, to  
designate a moving vehicle. In addition, many com-  
panies building engines were organized in the early years  
of the industry and included the word "motor" in their  
official names. As the companies prospered, the names  
became valuable assets and a change has been consid-  
ered unwise from a business standpoint.

Nomenclature is, in a last analysis, determined by  
usage. Many words are common today which are in a  
derivative sense, entirely illogical, as well as entirely  
different in meaning from what they meant originally.  
"Electric motor" and not "electric engine" is, of course,  
the name for the electric unit; and the term "steam  
motor" is not used as applying to a prime mover. "En-  
gine trucks" and "engine vehicles" would be equally  
anomalous.

There seems to be little doubt of the logic and con-  
sistency of the use of the word "engine" to denote the  
internal-combustion or "gas" unit of motor vehicles.

**N**OW is the time to go after repair business which  
will keep you occupied during the winter. Win-  
ter is the logical time for a man to have his car over-  
hauled. Send out circular letters to all those car own-  
ers who you think will need their cars overhauled, call-  
ing attention to the fact that you have the facilities for  
doing a thorough job, that is, if you have. If you have  
not, and unfortunately there are quite a few in this  
class, it is high time that you get them.

Complete shop equipment is essential to the turning  
out of a good overhaul job. It is also essential to the  
success of your business. To make a fair profit in the  
repair end of your business it is almost essential for  
you to be able to turn out thorough work in a minimum  
length of time, for time is money, and reliable work  
ensures future business.

**I**T is expected that the Bureau of Public Roads will call  
upon the various state highway commissions and  
good road organizations throughout the country to com-  
bat propaganda against motor truck transportation.  
Both manufacturers and owners of motor vehicles, es-  
pecially trucks, are making vigorous protests against the  
methods adopted by electric railways to secure freight  
traffic which is now transported over the highways.

**A**FTER the greatest summer season in its history,  
the automobile accessory business in Chicago is  
getting back to its accustomed stride. Dealers in acces-  
sories everywhere report sales in the past six months  
as beyond every expectation and preparation. Spot-  
lights, bumpers, stoplights and seat covers have been  
oversold in a number of places, and every dealer ex-  
pects that the winter will be good.

The great majority of American farmers prefer  
light truck for their delivery and hauling work as  
evidenced from a compilation of figures by the statis-  
tical department of the Republic Truck Sales Corp.,  
Alma, Mich. Forty-one per cent. of the trucks in  
use on American farms today are rated in the 3/4-1-ton  
class, 18 per cent. are 1 1/2-ton, 28 per cent. are 2-ton,  
4 per cent. are 3-ton and 9 per cent. are miscellaneous  
sizes.

Republic truck sales for the past three years,  
parallel the average of the United States, the per-  
centage of sales of various models to farmers being  
approximately the same as the figures given above.



# Prices of Current Models of Passenger Cars

## REVISED MONTHLY

\*With Starter and Demountable Rims.

Ace, F Roadster.....	\$1295	Cadillac 4-Pass. Victoria.....	3375	Daniels 2-Pass. Submarine Sp'dstr	4850	Gardner 5-Pass. Touring.....	895
Ace, F 5-Pass. Touring.....	1295	Case, X 3-Pass. Roadster.....	1750	Davis 71 5-Pass. Phaeton.....	1295	Gardner 5-Pass. Sedan.....	1345
Ace, F 5-Pass. Sport Sedan.....	2295	Case, X 5-Pass. Touring.....	1790	Davis 74 5-Pass. Sedan.....	1795	Gardner Business Coupe.....	1095
Ace, L 2 or 3 Pass. Roadster.....	2260	Case, X 5-Pass. Sedan.....	2690	Davis 61 5-Pass. Touring.....	1595	Gearless Steamer.....	2600
Ace, L 5-Pass. Touring.....	2260	Case, X 4-Pass. Suburban Coupe.....	2550	Davis 63 4-Pass. Sport.....	1695	Grant 2-Pass. Roadster.....	1385
Ace, L 5-Pass. Sport Sedan.....	3650	Case, W 7-Pass. Touring.....	2250	Davis 65 3-Pass. Roadster.....	1595	Grant 3-Pass. Touring.....	1385
Ace, C 2 or 3 Pass. Roadster.....	2975	Case, W 4-Pass. Coupe.....	2850	Davis 75 4 Pass. Coupe.....	1795	Grant 3-Pass. Coupe.....	1895
Ace, C 7-Pass. Touring.....	2975	Case, W 7-Pass. Sedan.....	3250	Detroit Steamer, Touring.....	1585	Grant 5-Pass. Sedan.....	1945
Ace, C 4-Pass. Sport Sedan.....	4000	Case, W 4-Pass. Sport.....	2200	Dixie Flyer 2-Pass. Roadster.....	1175	Gray Roadster.....	490
Adria, 2-Pass. Roadster.....	1295	Chalmers Roadster.....	1185	Dixie Flyer 2-Pass. Speedster.....	1245	Gray 5-Pass. Touring.....	490
Adria, 5-Pass. Touring.....	1295	Chalmers 5-Pass. Touring.....	1185	Dixie Flyer 5-Pass. Touring.....	995	Gray 5-Pass. Coach.....	760
Adria, 5-Pass. Sedan.....	1995	Chalmers 7-Pass. Touring.....	1345	Dixie Flyer 5-Pass. Sport Touring.....	1295	Hamlin-Holmes 4-Pass. Touring.....	2250
American 2-Pass. Roadster.....	1885	Chalmers 4-Pass. Coupe.....	1595	Dixie Flyer 4-Pass. Coupe.....	1545	Handley-Knight 5-Pass. Touring.....	2250
American 2-Pass. Touring.....	1785	Chalmers Sedan.....	2295	Dixie Flyer 5-Pass. Sedan.....	1595	Handley-Knight 7-Pass. Touring.....	2450
American 5-Pass. Touring.....	1850	Champion 5-Pass. Tourist.....	895	Dodge Bros. 2-Pass. Roadster.....	850	Handley-Knight Sport DeLuxe.....	2650
American 7-Pass. Touring.....	1850	Champion 5-Pass. Special.....	1050	Dodge Bros. 5-Pass. Touring.....	880	Handley-Knight 4-Pass. Coupe.....	2450
American 4-Pass. Sport.....	1885	Chandler 2-Pass. Roadster.....	1495	Dodge Bros. 2-P. Business Coupe.....	950	Handley-Knight 7-Pass. Sedan.....	3450
American 5-Pass. Sedan.....	2485	Chandler 2-Pass. Special Roadster.....	1595	Dodge Bros. 5-Pass. Sedan.....	1440	Hanover 2-Pass. Roadster.....	295
American Steamer, 5-Pass. Touring.....	1650	Chandler 4-Pass. Roadster.....	1495	Dorris 4-Pass. Tourist.....	3950	Hanson, 30 5-Pass. Touring.....	995
Anderson 2 or 5-Pass. Roadster.....	1495	Chandler 5-Pass. Touring.....	1495	Dorris 7-Pass. Touring.....	3950	Hanson, 60 2-Pass. Roadster.....	1595
Anderson 5-Pass. Touring.....	1495	Chandler 7-Pass. Touring.....	1645	Dorris 4-Pass. Coupe.....	4085	Hanson, 60 5-Pass. Touring.....	1595
Anderson 7-Pass. Touring.....	1595	Chandler 4-Pass. Coupe.....	1995	Dorris 7-Pass. Sedan.....	5750	Hanson, 60 7-Pass. Touring.....	1795
Anderson 4-Pass. Coupe.....	1995	Chandler 7-Pass. Sedan.....	2375	Dort 2-Pass. Roadster.....	885	Hanson, 60 4-Pass. Sport.....	1695
Anderson 5-Pass. Sedan.....	1995	Chandler 7-Pass. Limousine.....	2895	Dort 3-Pass. Harvard Coupe.....	1265	Hanson, 60 4-Pass. Coupe.....	2475
Anderson 2-Pass. Speedster.....	1785	Chandler 4-Pass. Dispatch.....	1645	Dort 2-Pass. Yale Coupe.....	1045	Hanson, 60 5-Pass. Sedan.....	2585
Anderson 4-Pass. Sport Touring.....	1595	Chandler, 4-Pass. Royal Dispatch.....	1745	Dort 5-Pass. Harvard Sedan.....	1385	Hatfield 4-Pass. Roadster.....	1345
Anderson 4-Pass. Ultra Sport Tour.....	1945	Chandler 5-P. Metropolitan Sedan.....	2295	Dort 5-Pass. Yale Sedan.....	1095	Hatfield 5-Pass. Touring.....	1345
Anderson 5-Pass. Alum. Six Tour.....	1195	Chevrolet Superior 2-Pass. Roadster.....	510	Driggs 2-Pass. Roadster.....	1275	Hatfield 4-Pass. Coupe.....	1950
Apperson 4-Pass. Sportster.....	2620	Chevrolet Superior 5-Pass. Touring.....	525	Driggs 4-Pass. Touring.....	1275	Hatfield 5-Pass. Sedan.....	1950
Apperson 7-Pass. Touring.....	2645	Chevrolet Superior 4-Pass. Coupe.....	840	Driggs 4-Pass. Sedan.....	1975	Haynes, 55 2-Pass. Roadster.....	1545
Apperson 4-Pass. Tourster.....	2995	Chevrolet Superior 5-Pass. Sedan.....	880	Driggs 2-Pass. Coupe.....	1675	Haynes, 55 5-Pass. Touring.....	1495
Apperson 7-Pass. Sedan.....	3695	Chevrolet Sup. 2-P. Utility Coupe.....	680	Duesenberg 2-Pass. Roadster.....	6500	Haynes, 55 3-Pass. Coupelet.....	2095
Apperson 4-Pass. Sprstr-Tourequip.....	3895	Chevrolet FB Roadster.....	865	Duesenberg 4-Pass. Touring.....	6500	Haynes, 55 5-Pass. Sedan.....	2895
Apperson 7-Pass. Limousine Sedan.....	3895	Chevrolet FB Touring.....	885	Duesenberg 5-Pass. Touring.....	6500	Haynes, 75 2-Pass. Speedster.....	2395
Apperson 4-Pass. Trstr-Tourequip.....	3245	Chevrolet FB Coupe.....	1325	Duesenberg 7-Pass. Touring.....	6750	Haynes, 75 7-Pass. Touring.....	2395
Apperson 4-Pass. Sedanet.....	3625	Chevrolet FB Sedan.....	1395	Duesenberg 4-Pass. Coupe.....	7800	Haynes, 75 7-Pass. Sedan.....	3395
Auburn 5-Pass. Touring.....	1475	Cleveland 3-Pass. Roadster.....	1085	Duesenberg 5-Pass. Sedan-Lim'sine.....	7800	Haynes, 75 4-Pass. Tourster.....	2595
Auburn 7-Pass. Touring.....	1545	Cleveland 5-Pass. Touring.....	1095	Duesenberg 7-Pass. Sedan-Lim'sine.....	7800	Haynes, 75 5-Pass. Brougham.....	3095
Auburn 7-Pass. Sedan.....	2345	Cleveland 4-Pass. Coupe.....	1495	Duesenberg 5-Pass. Brougham.....	8800	Haynes, 75 2-Pass. Suburban.....	3395
Auburn 4-Pass. Sport.....	1895	Cleveland 5-Pass. Sedan.....	1585	Duesenberg 6-Pass. Brougham.....	8250	Haynes, 48 2-Pass. Speedster.....	2895
Bay State 3-Pass. Roadster.....	1800	Cleveland Sport.....	1261	Duesenberg Chassis.....	5250	Haynes, 47 7-Pass. Touring.....	2895
Bay State 5-Pass. Touring.....	1800	Climber Four 2-Pass. Roadster.....	1385	DuPont 2-Pass. Roadster.....	3600	Haynes, 48 4-Pass. Tourster.....	2895
Bay State 4-Pass. Coupe.....	2400	Climber Four 5-Pass. Touring.....	1385	DuPont 5-Pass. Touring.....	3200	Haynes, 48 5-Pass. Brougham.....	3595
Bay State 5-Pass. Sedan.....	2500	Climber Six 2-Pass. Roadster.....	2250	DuPont 4-Pass. Coupe.....	3800	Haynes, 48 7-Pass. Sedan.....	3895
Beggs, 5-Pass. Touring.....	1495	Climber Six 5-Pass. Touring.....	2250	DuPont 5-Pass. Suburban Sedan.....	4000	Haynes, 48 7-Pass. Suburban.....	3895
Beggs, 4-Pass. Coupe.....	2195	Climber Six 2-Pass. Coupe.....	2490	DuPont 6-Pass. Touring Sedan.....	4000	Holmes 4-Pass. Roadster.....	2500
Beggs, 5-Pass. Sedan.....	2295	Climber Six 5-Pass. Sedan.....	2750	Durant Four 2-Pass. Roadster.....	890	Holmes 7-Pass. Touring.....	2500
Beggs, 5-Pass. Sport.....	1595	Coats Steamer 2-Pass. Roadster.....	1085	Durant Four 4-Pass. Coupe.....	1385	Holmes 7-Pass. Tring w. Arto. Top.....	2600
Bell, 4-32 Roadster.....	10 1/2	Coats Steamer 5-Pass. Touring.....	1085	Durant Four 5-Pass. Sedan.....	1385	Holmes 4-Pass. Coupe.....	3300
Bell, 4-32 Touring.....	1300	Coats Steamer 5-Pass. Sedan.....	1495	Durant Six 2-Pass. Roadster.....	1600	Holmes 6-Pass. Sedan.....	3800
Bell, 4-32 Roadster.....	1300	Cole 2-Pass. Roadster.....	2685	Durant Six 5-Pass. Touring.....	1850	Howard.....	
Bell, 6-50 Roadster.....	1300	Cole 4-Pass. Sportster.....	2685	Durant Six 4-Pass. Coupe.....	2250	H. C. S. 2-Pass. Roadster.....	2475
Bell, 6-50 Touring.....	1300	Cole 7-Pass. Touring.....	3395	Durant Six 5-Pass. Sedan.....	2400	H. C. S. 5-Pass. 1. Touring.....	2175
Biddle Roadster.....	2950	Cole 4-Pass. Coupe.....	3385	Earl 2-Pass. Roadster.....	1485	H. C. S. Sport Sedan.....	3250
Biddle Touring.....	2950	Cole 7-Pass. Sedan.....	3885	Earl 4-Pass. Cabriolet.....	1395	H. C. S. 5-Pass. Sedan.....	3475
Biddle Coupe Sedan.....	3950	Cole 7-Pass. Coupe.....	2885	Earl 5-Pass. Touring.....	1095	Hudson 4-Pass. Phaeton.....	1525
Biddle Brougham.....	5200	Cole 7-Pass. Berline.....	3885	Earl 5-Pass. Sedan.....	1795	Hudson 7-Pass. Phaeton.....	1575
Biddle Limousine.....	5650	Cole 7-Pass. Suburban.....	3685	Earl 4-Pass. Brougham.....	1795	Hudson 4-Pass. Coupe.....	2370
Birch, 30 Roadster.....	795	Cole 7-Pass. Tousedan.....	3185	Earl 4-Pass. Cabriolet.....	1395	Hudson 7-Pass. Sedan.....	2295
Birch, 30 Touring.....	795	Columbia Light Six 5-Pass. Touring.....	985	Elcar Four 3-Pass. Roadster.....	1095	Hudson 5-Pass. Coach.....	1625
Birch, 44 Roadster.....	1095	Columbia Light Six 5-Pass. Sedan.....	1395	Elcar Four 5-Pass. Touring.....	1095	Huffman 3-Pass. Roadster.....	1575
Birch, 44 Touring.....	1095	Columbia DeLuxe 2-Pass. Roadster.....	1475	Elcar Sportster.....	1095	Huffman 5-Pass. Touring.....	1395
Birch, 44 4-Pass. Sedan.....	1795	Columbia DeLuxe 5-Pass. Touring.....	1475	Elcar Four 3-Pass. Coupe.....	1345	Huffman 3-Pass. Coupe.....	2295
Birch, 44 4-Pass. Sport.....	1795	Columbia DeLuxe 4-Pass. Sport.....	1475	Elcar Six 3-Pass. Roadster.....	1395	Huffman 5-Pass. Sedan.....	2295
Birch, 66 Roadster.....	1295	Columbia DeLuxe 4-Pass. Coupe.....	2295	Elcar Six 4-Pass. Sportster.....	1395	Hupmobile 2-Pass. Roadster.....	1150
Birch, 66 Touring.....	1295	Columbia DeLuxe 5-Pass. Sedan.....	2350	Elcar Six 5-Pass. Touring.....	1395	Hupmobile 5-Pass. Touring.....	1150
Birch, 66 7-Pass. Sedan.....	1995	Comet 5-Pass. Touring.....	2150	Elcar Six 3-Pass. Coupe.....	1975	Hupmobile 4-Pass. Coupe.....	1635
Birch, 66 4-Pass. Sport.....	1345	Comet 5-Pass. Sedan.....	2950	Elcar Six 5-Pass. Sedan.....	1995	Hupmobile 5-Pass. Sedan.....	1785
Bour Davis, 5-Pass. Touring.....	1650	Corinthian 2-Pass. Roadster.....	5000	Elcar Six 5-Pass. Brougham.....	1995	Hupmobile 2-Pass. Roadster-Coupe.....	1335
Bour Davis, 7-Pass. Touring.....	1650	Corinthian 5-Pass. Touring.....	5000	Elgin, K-1 2-Pass. Roadster.....	1345	Jackson 4-Pass. Sport.....	1685
Bradley.....		Corinthian 7-Pass. Touring.....	5000	Elgin, K-1 5-Pass. Touring.....	1295	Jackson 5-Pass. Touring.....	1485
Brewster, 4-Pass. Roadster.....	5000	Corinthian 3 or 4-Pass. Coupe.....	6375	Elgin, K-1 4-Pass. Scout.....	1345	Jackson 5-Pass. Semi-Sport.....	1585
Brewster, 5-Pass. Touring.....	5000	Corinthian 7-Pass. Sedan.....	7290	Elgin, K-1 4-Pass. Coupe.....	1695	Jackson 4-Pass. Coupe.....	2385
Brewster, 6-Pass. Sedan.....	7000	Courier 2-Pass. Roadster.....	1395	Elgin, K-1 5-Pass. Sedan.....	1695	Jackson 5-Pass. Sedan.....	2385
Brewster 6-Pass. Limousine.....	7000	Courier 5-Pass. Phaeton.....	1395	Essex 5-Pass. Phaeton.....	1045	Jackson 5-Pass. California Special.....	1885
Brewster 6-Pass. Brougham.....	7000	Courier 4-Pass. Sport.....	1495	Essex 4 or 5-Pass. Coach.....	1245	Jewett 2-Pass. Roadster.....	995
Brewster 6-Pass. Landulet.....	7000	Courier Sport Roadster.....	1395	Essex 2 or 3-Pass. Cabriolet.....	1145	Jewett 5-Pass. Touring.....	995
Brewster 6-Pass. Cabriolet.....	7000	Courier Coupe.....	2165	Fergus Chassis.....	8500	Jewett 4-Pass. Coupe.....	1445
Brewster 6-Pass. Limousine L'nd'let.....	7000	Courier Sedan.....	2165	Ferris 2-Pass. Roadster.....	2895	Jewett 5-Pass. Sedan.....	1465
Buick Four 2-Pass. Roadster.....	885	Crawford 2-Pass. Roadster.....	3000	Ferris 6-Pass. Touring.....	2795	Jordan 2-Pass. Roadster.....	1895
Buick Four 3-Pass. Coupe.....	1175	Crawford 4-Pass. Touring.....	3000	Ferris 6-Pass. Sport.....	2995	Jordan 5-Pass. Touring.....	1795
Buick Four 5-Pass. Sedan.....	1395	Crawford 5 or 7-Pass. Touring.....	3000	Ferris 4-Pass. Closed.....	3895	Jordan 4-Pass. Sport.....	2150
Buick Four Touring Sedan.....	1325	Crawford 3 or 4-Pass. Coupe.....	4500	Ford 2-Pass. Runabout.....	319	Jordan 5-Pass. Sedan.....	2485
Buick Six 3-Pass. Roadster.....	1175	Crawford 5 or 7-Pass. Sedan.....	4500	Ford 2-Pass. Runabout*.....	414	Jordan 4-Pass. Brougham.....	2485
Buick Six Sport Roadster.....	1625	Cunningham.....	On app.	Ford 5-Pass. Touring.....	348	Jordan 2-Pass. Landulet.....	2485
Buick Six 5-Pass. Touring.....	1195	Dagmar Sport.....	3500	Ford 5-Pass. Touring*.....	443	Kelsey Four 2-Pass. Roadster.....	985
Buick Six Sport Touring.....	1675	Dagmar Sedan.....	4250	Ford 2-Pass. Coupe*.....	580	Kelsey Four 5-Pass. Touring.....	985
Buick Six 5-Pass. Sedan.....	1985	Daniels 3-Pass. Roadster.....	4350	Ford 5-Pass. Sedan*.....	645	Kelsey Four 4-Pass. Coupe.....	1400
Buick Six 4-Pass. Coupe.....	1895	Daniels 2-Pass. Marine Roadster.....	4350	Fox 5-Pass. Touring.....	3990	Kelsey Four 5-Pass. Sedan.....	1450
Buick Six 7-Pass. Touring.....	1435	Daniels 4-Pass. Emergency R'dster.....	4350	Fox 3-Pass. Coupe.....	4990	King 2-Pass. Roadster.....	1795
Buick Six 7-Pass. Sedan.....	2195	Daniels 7-Pass. Touring.....	4350	Franklin 2-Pass. Runabout.....	19 1/2	King 7-Pass. Touring.....	1795
Buick Six Touring Sedan.....	1935	Daniels 3 to 4-Pass. Coupe.....	5350	Franklin 5-Pass. Touring.....	1850	King 4-Pass. Tourster.....	1795
Bush Four, 5-Pass. Touring.....	1125	Daniels 7-Pass. Sedan.....	6000	Franklin 4-Pass. Coupe.....	2750	King 6-Pass. Sedan.....	2550
Bush Six, 5-Pass. Touring.....	1350	Daniels 7-Pass. Special Sedan.....	6800	Franklin 5-Pass. Sedan.....	2850	Kissel 4-Pass. De Luxe Speedster.....	2385
Cadillac 2-Pass. Roadster.....	3100	Daniels 4-Pass. Close Coupled Sedan.....	8250	Franklin 2-Pass. Demi-Coupe.....	2190	Kissel 5-Pass. Standard Touring.....	1885
Cadillac 5-Pass. Phaeton.....	3150	Daniels 7-Pass. Landulet Br'gham.....	7100	Franklin 5-Pass. Demi-Coupe.....	2790	Kissel 7-Pass. De Luxe Tourster.....	2385
Cadillac 7-Pass. Touring.....	3150	Daniels 6-Pass. Landulet Br'gham.....	7250	Franklin 4-Pass. Brougham.....	2790	Kissel 4-Pass. De Luxe Coupe.....	2975
Cadillac 2-Pass. Coupe.....	3250	Daniels 5-Pass. Town Brougham.....	6250	Franklin 5-Pass. Touring-Limousine.....	3150	Kissel 6-Pass. De Luxe Sedan.....	3075
Cadillac 5-Pass. Coupe.....	3925	Daniels 7-Pass. Town Limousine.....	6250	Frontenac.....		Kissel 6-Pass. De Luxe Urban Sed.....	3375
Cadillac 5-Pass. Sedan.....	4100	Daniels 7-Pass. Landulet Suburban.....	6300				
Cadillac 7-Pass. Limousine.....	4550	Daniels 2-Pass. Cabriolet.....	5300				
Cadillac 7-Pass. Imperial Limousine.....	4900	Daniels, D 7-Pass. Suburban Lim'se.....	6900				
Cadillac 7-Pass. Suburban.....	4250						



6-Pass. De Luxe Coach Sed.	3375	Monroe 5-Pass. Sedan	1500	Pierce-Arrow 7-Pass. Vestibule Sed.	7000	Stearns-Knight Four 7-P. Lim. O. App.	
Kline 3-Pass. Roadster	1690	Moon, 6-40 Touring	1295	Pierce-Arrow 4-Pass. Sedan	6900	Stearns-Knight Four 7-P. Ber. Sed.	3650
Kline 5-Pass. Sport Touring	1690	Moon, 6-40 5-Pass. Sedan	1695	Pierce-Arrow 4-Pass. Coupe-Sedan	6800	Stearns-Knight Four 5-P. Brg. (pe. 3250	
Kline 7-Pass. Touring	1690	Moon 6-40, 5-Pass. Touring	1443	Pierce-Arrow 6-Pass. Fr. Limousine	7030	Stearns-Knt. Four 7-P. Lt. Brg. on App	
Kline 3-Pass. Coupe	2750	Moon 6-40, 4-Pass. Coupe	1585	Pilot, 6-45 4-Pass. Roadster	1500	Stearns-Knight S x Roadster	2700
Kline 5-Pass. Sedan	2730	Moon, 6-58 5-Pass. Touring	1785	Pilot, 6-45 5-Pass. Touring	1500	Stearns-Knight Six 4 or 5-Pass. T'g	2700
Kurtz 3-Pass. Roadster	2050	Moon, 6-58 7-Pass. Touring	1785	Pilot, 6-50 2-Pass. Roadster	2050	Stearns-Knight S x 7-Pass. Touring	2850
Kurtz 5-Pass. Touring	2050	Moon 6-58 5-Pass. Sporttour	1885	Pilot, 6-50 5-Pass. Touring	2000	Stearns-Knight Six Coupe	3350
Kurtz 7-Pass. Touring	2100	Moon 6-58 7-Pass. Sedan	2485	Pilot, 6-50 7-Pass. Touring	2050	Stearns-Knight Six C'pe-Brougham	3500
Kurtz 3-Pass. Coupe	3000	Moon 6-58 5-Pass. Touring Sedan	2485	Pilot, 6-50 4-Pass. Coupe	2950	Stearns-Knight Six Sedan	3700
Kurtz 5-Pass. Brougham	3000	Murray-Mac Touring	4250	Pilot, 6-50 5-Pass. Sedan	3000	Stearns-Knight 2-Pass. Roadster	1575
Kurtz 5-Pass. Sedan	3000			Pilot, 6-50 7-Pass. Sedan	3150	Stearns Special 2-Pass. Roadster	1625
Kurtz 7-Pass. Sedan	3100			Pilot, 6-50 4-Pass. Sportster	2100	Stearns 4-Pass. Touring	1695
				Prado Touring	11000	Stearns 6-Pass. Touring	1625
La Fayette 2-Pass. Roadster	3985	Nash Four 2-Pass. Roadster	915	Premier 2-Pass. Roadster	3150	Stearns 4-Pass. Brougham	2450
La Fayette 7-Pass. Touring	4090	Nash Four 5-Pass. Touring	935	Premier 4-Pass. Touring	3100	Stearns 7-Pass. Sedan	2550
La Fayette 4-Pass. Torpedo	4090	Nash Four 3-Pass. Coupe	1335	Premier 7-Pass. Touring	3250	Stearns 5-Pass. Sedan	2000
La Fayette 4-Pass. Coupe	5500	Nash Four 4-Pass. Sedan	1545	Premier 4-Pass. Sedan	5000	Stearns Special 4-Pass. Touring	1645
La Fayette 7-Pass. Sedan	5500	Nash Four 2-Pass. Cab	1195	Premier 7-Pass. Sedan	5100	Stearns Special 6-Pass. Touring	1675
La Fayette 7-Pass. Limousine	5750	Nash Four 5-Pass. Carrial	1275	Premier 7-Pass. Limousine	5200	Sterling-Knight 2-Pass. Roadster	3750
La Fayette 7-Pass. Vestibule Sedan	6250	Nash Six 2-Pass. Roadster	1210	Premier 4-Pass. Brougham	4300	Sterling-Knight 5-Pass. Touring Car	3750
Leach 3-Pass. Roadster	5500	Nash Six 5-Pass. Touring	1240	Premocac 3-Pass. Roadster	1095	Sterling-Knight 7-Pass. Touring Car	3750
Leach 5-Pass. Touring	5500	Nash Six 7-Pass. Touring	1390	Premocac 5-Pass. Touring	1095	Sterling-Knight 4-Pass. Coupe	4700
Leach 5-Pass. Chummy Roadster	5500	Nash Six 4-Pass. Coupe	1390	Premocac 4-Pass. Coupe	1750	Sterling-Knight 6-Pass. Sedan	4900
Leach 4-Pass. Coupe	5500	Nash Six 7-Pass. Sedan	2190	Premocac 5-Pass. Sedan	1825	Sterling-Knight 6-Pass. Limousine	5000
Leach 5-Pass. Sedan	5500	Nash Six 4-Pass. Sport	1395	Premocac California Top	1195	Sterling-Knight 6-Pass. Berline	5000
Leach 7-Pass. Limousine	5500	National 3-Pass. Roadster	2475	Premocac 4-Pass. Coupe	1750	Sterling-Knight 4-Pass. Brougham	4900
Lexington 2-Pass. Roadster	1695	National 4-Pass. Phaeton	2175			Sterling-Knight 6-Pass. Landaulet	5250
Lexington 5-Pass. Touring	1695	National Newport 4-Pass. Phaeton	3025	Raleigh 3-Pass. Roadster	2300	Stevens-Duryea 2-Pass. Roadster	7250
Lexington 7-Pass. Touring	1795	National 7-Pass. Touring	2375	Raleigh 6-Pass. Touring	2450	Stevens-Duryea 7-Pass. Touring	6800
Lexington 5-Pass. California	1995	National Newport 7-Pass. Phaeton	3150	Raleigh 4-Pass. Coupe	3200	Stevens-Duryea 4-Pass. Touring	6900
Lexington 7-Pass. California	2095	National 4-Pass. Coupe	3725	Raleigh 5-Pass. Sedan	3300	Stevens-Duryea 6-Pass. Sedan	8600
Lexington 5-Pass. Sport	2045	National 7-Pass. Sedan	3825	Ranger 2-Pass. Roadster	1195	Stevens-Duryea 7-Pass. Limousine	8900
Lexington 5-Pass. Royal Coach	2145	Noma 2-Pass. Roadster	2500	Ranger Special 2-Pass. Roadster	1350	Stevens-Duryea 6-Pass. Berline	8600
Lexington 4-Pass. Coupe	2345	Noma 4-Pass. Touring	2500	Ranger 5-Pass. Touring	1195	Stevens-Duryea 7-Pass. Berline	8900
Lexington 5-Pass. Sedan	2545	Noma 6-Pass. Touring	2600	Ranger Special 5-Pass. Touring	1350	Studebaker Light-Six 3-P. Roadster	975
Lexington 4-Pass. Brougham	2645	Noma 5-Pass. Sedan	3500	Reo 7-Pass. Touring	1485	Studebaker Light-Six 5-P. Touring	975
Liberty 2-Pass. Cavalier Roadster	1575	Norwalk 5-Pass. Touring	1035	Reo 4-Pass. Phaeton	1645	Studebaker Light-Six 2-P. Cpe.-Rd.	1235
Liberty 5-Pass. Touring	1595			Reo 5-Pass. Coupe	2355	Studebaker Light-Six 5-P. Sedan	1550
Liberty 5-Pass. Cavalier Touring	1575	Oakland 2-Pass. Roadster	975	Re 5-Pass. Sedan	2435	Studebaker Spec. Six 2-P. Roadster	1250
Liberty 4-Pass. Coupe	2085	Oakland 5-Pass. Touring	995	Re Vere 4-Pass. Roadster	3200	Studebaker Spec. Six 4-P. Roadster	1275
Liberty 5-Pass. Sedan	2245	Oakland, 4-Pass. Sport	1165	Re Vere 4-Pass. Touring	3200	Studebaker Spec. Six 5-P. Touring	1275
Lincoln 2-Pass. Roadster	3800	Oakland 2-Pass. Coupe	1165	Re Vere 5-Pass. Touring	3200	Studebaker Spec. Six 4-Pass. Coupe	1875
Lincoln 7-Pass. Touring	3800	Oakland 4-Pass. Coupe	1445	Re Vere 5-Pass. Sedan	4000	Studebaker Spec. Six 5-Pass. Sedan	2050
Lincoln 4-Pass. Phaeton	3800	Oakland 5-Pass. Sedan	1545	Richelieu Touring	3950	Studebaker Bix Six 7-P. Touring	1850
Lincoln 5-Pass. Coupe	4400	Ogren 4-Pass. Roadster	3750	Rickenbacker 5-Pass. Touring	1485	Studebaker Bix Six Speedster	1785
Lincoln 6-Pass. Sedan	4700	Ogren 5-Pass. Sport	3750	Rickenbacker 4-Pass. Coupe	1885	Studebaker Bix Six 4-Pass. Coupe	2275
Lincoln 7-Pass. Sedan	4900	Ogren 7-Pass. Sport	3550	Rickenbacker 5-Pass. Sedan	1985	Studebaker Bix Six 7-Pass. Sedan	2475
Lincoln 4-Pass. Sedan	5200	Ogren 4-Pass. Coupe	4500	Roamer Six 2 or 4-Pass. Roadster	2685	Stutz 2-Pass. Roadster	2450
Lincoln 7-Pass. Limousine	5100	Ogren 5-Pass. Sedan	4800	Roamer Six 4-Pass. Touring	2435	Stutz 6 or 7-Pass. Touring	2645
Lincoln 7-Pass. Town Car	7200	Ogren 7-Pass. Sedan	4800	Roamer Six 5-Pass. Coupe	3585	Stutz 4 or 5-Pass. Touring	2790
Locomobile 4-Pass. Touring	7600	Oldsmobile Four 4-Pass. Roadster	975	Roamer Six 7-Pass. Touring	3685	Stutz 4-Pass. Coupe	3490
Locomobile 4-Pass. Touring	7600	Oldsmobile Four 5-Pass. Touring	975	Roamer Six 3-Pass. Cabriolet	3285	Stutz 5-Pass. Sport Sedan	4275
Locomobile 6-Pass. Sedan	11000	Oldsmobile Four 4-Pass. Sport	1075	Roamer Six 5-Pass. Sedan	3935	Sun 2-Pass. Roadster	575
Locomobile Coupe Limousine	10500	Oldsmobile Four 4-Pass. Coupe	1475	Roamer Six 7-Pass. Touring	3785	Sun 4-Pass. Touring	595
Locomobile 7-Pass. Limousine	9150	Oldsmobile Four 5-Pass. Sedan	1597	Roamer Four 2-Pass. Speedster	3785		
Locomobile 7-Pass. Landaulet	9150	Oldsmobile Four 5-Pass. Calif Top	1351	Roamer Four Touring	3485		
Locomobile Cabriolet	10700	Oldsmobile Four Brougham	1375	Roamer Four 4-Pass. Sport	3650		
Lone Star 2-Pass. Roadster	1395	Oldsmobile, 47 4-Pass. Roadster	1495	Roamer Four 4-Pass. Sport Sedan	4650		
Lone Star 5-Pass. Touring	1195	Oldsmobile, 47 5-Pass. Touring	1375	Rodgers Touring	1295		
Lone Star 5-Pass. Beauty T. Tring	1395	Oldsmobile, 47 4-Pass. Sport	1495	Rolls-Royce 4 or 5-Pass. Phaeton	10900		
		Oldsmobile, 47 4-Pass. Coupe	1875	Rotary Six 7-Pass. Touring	4000		
		Oldsmobile, 47 5-Pass. Sedan	2205	R & V Knight 4 5-Pass. Touring	1665		
		Oldsmobile, 47 Super Sport	1675	R & V Knight 4 4-Pass. Coupe	2385		
		Oldsmobile, 46 7-Pass. Touring	1735	R & V Knight 4 5-Pass. Sedan	2475		
		Oldsmobile, 46 6-Pass. Sport	1850	R & V Knight Six 2-Pass. Roadster	2475		
		Oldsmobile, 46 4-Pass. Sport	1735	R & V Knight Six 4-Pass. Sport	2475		
		Oldsmobile, 46 7-Pass. Sedan	2635	R & V Knight Six 7-Pass. Touring	2475		
		Overland 2-Pass. Roadster	525	R & V Knight Six Coupe	3015		
		Overland 5-Pass. Touring	525	R & V Knight Six Sedan	3105		
		Overland 2-Pass. Coupe	795				
		Overland 5-Pass. Sedan	875	Saxon 2-Pass. Roadster	1195		
				Saxon 5-Pass. Touring	1195		
		Packard Single-Six 2-Pass. R'dster	2485	Saxon 5-Pass. Sport	1295		
		Packard Single-Six 5-Pass. Touring	2485	Saxon 3-Pass. Coupe	1795		
		Packard Single-Six 7-Pass. Touring	2685	Saxon 5-Pass. Sedan	1795		
		Packard Single-Six 4-Pass. Coupe	3175	Sayers 2-Pass. Roadster	1645		
		Packard Single-Six 5-Pass. Sedan	3275	Sayers 5-Pass. Touring	1845		
		Packard Single-Six 4-Pass. Sport	2650	Sayers 4-Pass. Coupe	2645		
		Packard Single-Six 7-Pass. Sedan	3525	Sayers 5-Pass. Sedan	2645		
		Packard Single Six 7-P. Sed.-Lim.	3575	Seneca, O-2 2-Pass. Roadster	875		
		Packard Twin-Six 2-Pass. Runabout	3850	Seneca, L-2 5-Pass. Touring	875		
		Packard Twin-Six 7-Pass. Touring	3850	Seneca, 50 2-Pass. Roadster	1095		
		Packard Twin-Six 4-Pass. Phaeton	3850	Seneca, 50 5-Pass. Touring	1095		
		Packard Twin-Six Coupe	5240	Skelton 2-Pass. Roadster	995		
		Packard Twin-Six Sedan	5400	Skelton 5-Pass. Touring	995		
		Packard Twin-6 7-Pass. Limousine	5275	Spencer 2-Pass. Roadster	750		
		Paige, 6-44 2-Pass. Roadster	1465	Spencer 5-Pass. Touring	900		
		Paige, 6-44 5-Pass. Touring	1465	Spencer 3-Pass. Coupe	900		
		Paige, 6-44 4-Pass. Sport	1595	Spencer 5-Pass. Sedan	900		
		Paige, 6-44 4-Pass. Coupe	1995	Sperling 3-Pass. Roadster	980		
		Paige, 6-44 5-Pass. Sedan	2245	Sperling 5-Pass. Touring	980		
		Paige, 6-66 7-Pass. Touring	2195	Sperling 5-Pass. Sedan	1485		
		Paige, 6-66 4-Pass. Sport	2245	Standard 2-Pass. Roadster	2150		
		Paige, 6-66 5-Pass. Coupe	3100	Standard 4-Pass. Sport	2395		
		Paige, 6-66 7-Pass. Sedan	3155	Standard 7-Pass. Touring	2395		
		Paige, 6-66 Limousine	3350	Standard 4-Pass. Coupe	2750		
		Paige, 6-66 Daytona	2495	Standard 7-Pass. Sedan	3200		
		Pan 5-Pass. Touring	1190	Standard 4-Pass. Sedanette	3000		
		Paterson 5-Pass. Touring	1390	Standard 7-Pass. Vestibule Sedan	3350		
		Paterson 7-Pass. Touring	1425	Stanley Steamer 2-Pass. Roadster	2750		
		Paterson, 4-Pass. Coupe	2395	Stanley Steamer 5-Pass. Phaeton	2750		
		Paterson 5-Pass. Sedan	2395	Stanley Steamer 7-Pass. Phaeton	2750		
		Peerless 4-Pass. Phaeton	2990	Stanley Steamer 7-Pass. Sedan	3995		
		Peerless 7-Pass. Phaeton	2990	Stanley Steamer 4-Pass. Brougham	3950		
		Peerless 2-Pass. Town Coupe	3390	Stanwood 2-Pass. Roadster	1765		
		Peerless 4-Pass. Suburban Coupe	3400	Stanwood 5-Pass. Touring	1765		
		Peerless 5-Pass. Town Sedan	3900	Stanwood 5-Pass. Brougham	2750		
		Peerless 7-Pass. Suburban Sedan	4090	Star 2-Pass. Roadster	319		
		Peerless 7-Pass. Berline Limousine	4390	Star 2-Pass. Roadster*			
		Peerless 4-Pass. Opera Brougham	4900	Star 5-Pass. Touring	348		
		Piedmont Four Touring	970	Star 5-Pass. Touring*			
		Piedmont Six Touring	1285	Star 2-Pass. Coupe	580		
		Pierce-Arrow 3-Pass. Roadster	5250	Star 5-Pass. Sedan	645		
		Pierce-Arrow 4-Pass. Touring	5250	Stearns-Knight 3-Pass. Roadster	2250		
		Pierce-Arrow 7-Pass. Touring	6250	Stearns-Knight Four 5-Pass. T'ring	2250		
		Pierce-Arrow 3-Pass. Coupe	6800	Stearns-Knight Four 7-Pass. T'ring	2450		
		Pierce-Arrow 7-Pass. Sedan	7000	Stearns-Knight Four 4-Pass. Coupe	3150		
		Pierce-Arrow 7-Pass. Limousine	7000	Stearns-Knight Four 7-Pass. Sedan	4450		





## Concerning Oxygen Purity

The LINDE standard of purity is more than a matter of mere figures. It is three fold:

*A minimum* purity of 99%.

LINDE plants are in fact producing oxygen of a purity substantially in excess of 99%.

*A uniform* purity.

Painstaking care to produce oxygen that can always be depended upon to produce uniform results.

*An assured* purity.

A system of quadruple checking and inspection that not only gives a continuous control of purity during production, but which finally proves the thoroughness of production control.

The efficiency of LINDE OXYGEN fully satisfies the demands of the largest and most exacting users in America.

No oxygen user, large or small, should close an arrangement for oxygen supply without first securing 1922 prices from the nearest LINDE District Sales Office.

For Your Convenience—Distributing Stations at every important industrial center.

At Your Service—District Sales Offices in these cities:

ATLANTA  
BALTIMORE  
BOSTON

BUFFALO  
CHICAGO  
CLEVELAND

DALLAS  
DETROIT  
KANSAS CITY

MILWAUKEE  
NEW YORK  
PHILADELPHIA

PITTSBURGH

ST. LOUIS

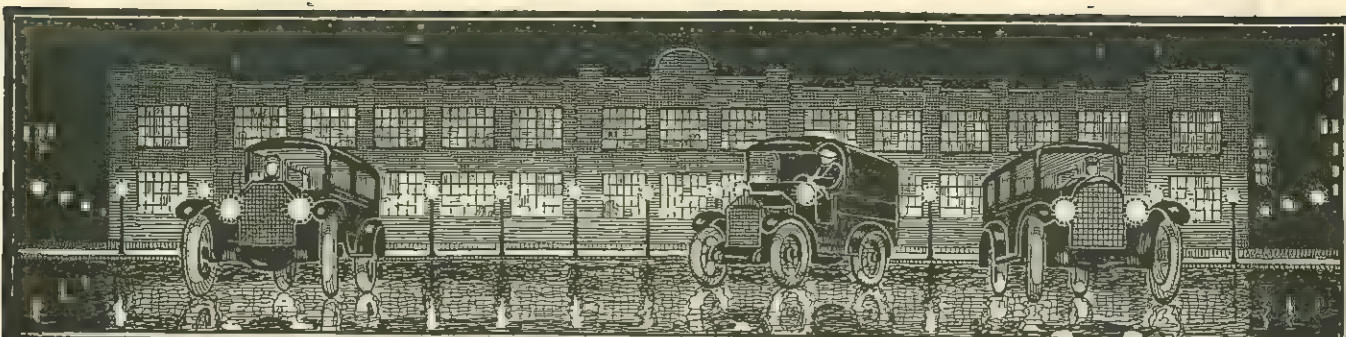
SAN FRANCISCO

THE LINDE AIR PRODUCTS COMPANY

Carbide and Carbon Building, 30 East 42nd Street, New York

THE LARGEST PRODUCER OF OXYGEN IN THE WORLD





## MANUFACTURERS' NOTES

Taylor Rubber Co., Ltd., has acquired a block of 48 acres of land in Aurora, Ont., is planning to erect a factory to which its manufacturing operations will be transferred. Engineers are at work on plants, but building has not yet commenced. The plant will have a capacity of 500 tires a day.

Martin-Parry Corp. reports sales of bodies about 75 per cent. ahead of last year, with August sales about double last year. Although dollar volume is smaller than last year per body, total sales in dollars still is well ahead of 1921 because of increased production.

Metropolis Bending Co., Cleveland, manufacturer of top bows, has succeeded the Union Bow Co., through which it has sold its product for many years. A. E. Puls, formerly in charge of the sales department of the Union Bow Co., has been appointed sales manager and assistant treasurer with headquarters in Cleveland.

The first unit of the new Flint Motor Car Co., organized by W. C. Durant, is now under way and should be completed, according to contract, by July 1, 1923. This unit will be 900 feet by 80.

Walworth Realty Co., a subsidiary of the Walworth Manufacturing Co. of Boston, has awarded a contract for the construction of a warehouse, pipe shop and garage in Long Island City. The main building will contain the offices, city sales department, shipping room, and space for the storage of fittings and materials. The pipe storage building is to be 60 x 214 feet.

P. J. Janssen, Ltd., exporter of automotive products with offices in New York City, Singapore and Bandoeng, Java, has opened offices in Amsterdam to handle the business in Holland, Belgium and Scandinavian countries of American automotive manufacturers.

L. H. Gilmer Co., Tacony, manufacture of automotive equipment, is producing 20,000 fan belts every twenty-four hours, according to Ludwell H. Gilmer, president. This department is operating at two-thirds of capacity, while other departments are running twenty-four hours a day. The plant is shipping approximately 150,000 fan belts and 1,000,000 feet of brake bands a month to the Ford Motor Co. The company has approved plans and is about to award a contract for the erection of a new power plant and a storage house at a cost of approximately \$200,000.

Holbrook Co., manufacturer of automobile bodies, announces plans to double its present capacity at the Hudson, N. Y., plant. The company now employs 120 men. An addition to its present plant to cost \$100,000 will be erected.

Mueller Electric Co. has completed its new building at 1583 East 31st St., Cleveland, which will permit it to expand its activities in the manufacture of electric specialties.

Springfield Commercial Body Co., Inc., has been formed in Springfield Mass., to manufacture, repair and deal in automobile bodies. Charles B. Ring is president and L. Philip Smith is treasurer of the concern, which has an authorized capitalization of \$200,000.

Racine (Wis.) Metal Stamping Co. has changed its corporate title to Racine Screw Works, to better designate the present nature of its principal business. Albert O. Falkenrath is president, and Jerome J. Ritter, secretary.

Federal Rubber Co., Cudahy, Wis., has started construction work on three additional floors of a new seven-story manufacturing addition, 120 x 250 ft., the foundations and first floor of which were erected last year. The structure is projected as a seven-story building, and the remaining three stories will be built early in 1923. It will represent an investment of about \$400,000, including equipment.

Cropper-Kinney Auto Spring Co. has been incorporated at Lebanon, Ohio. George Cropper, president and treasurer has been connected with the Milburn Wagon Co., on its sales force, for the past 25 years. L. H. Kinney, vice-president and general superintendent had charge of the Studebaker spring factories for over 12 years. Lately he was president of the Cincinnati Auto Spring Co. A. M. Kinney will be assistant superintendent. The company expects to be in operation by Oct. 15 and will manufacture the Star Brand spring.

Borg & Beck Co., clutch manufacturer, plans to transfer its recently acquired Hough Mechanical Hoist Co. from Chicago to Moline with a force of 100 men. The hoist is used to elevate dumping wagon bodies.

Lee Motors, Inc., Syracuse, has taken over the agency for Syracuse and Central New York for the Oakland.



## REVISED MONTHLY

[illegible]

H-Spill	Own	4 3 3x5	249 25 35	57 3200	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Auto 2	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780
Own	4 3 3x5	102 19 00	33 2800	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Auto 2	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Supern	4 3 3x5	340 31 34	76 2200	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K S-H	Auto 2	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
H-Spill	Own	4 3 3x5	250 20 40	65 2200	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	G & D	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780
Cont	4 3 3x5	252 37 37	55 2200	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Person Anniver	4 3 3x5	352 33 46	64 2500	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Hyur-2	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	242 27 34	58 2200	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Own	4 3 3x5	242 27 34	50 2000	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Own	4 3 3x5	224 25 35	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
H-Spill	Own	4 3 3x5	192 19 60	33 2500	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780
H-Spill	Own	4 3 3x5	224 27 34	50 2000	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War	U P 3	Full	Spl	Salsbury	3/4 F Sp B	118	12x4	312780	
Cont	4 3 3x5	224 27 34	55 2400	L Blk	1 1/2	1 1/2	Hel	P	P	P	F & S	Stmb V	At K	Remy S-H	D D	War</									



[illegible]



[illegible]



NAME AND MODEL	ENGINE										Car-buretor	IG-NITION SYSTEM		Make of Starting-Lighting System	Type of Clutch	Make of Clutch and Forward Speeds	Make of Universal Joints	REAR AXLE			RUNNING GEARS				No. Crankshaft Bearings	Weight of Car Ready for Road																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Make of Engine	Number Cylinders	Bore and Stroke In Inches	Plateon Displacement	N. A. O. C. Rated H. P.	Max. Brake H. P.	R. P. M. at Max.	Shape of Cylinder	How Cylinders are Cast	With T. Ring Groove		Diam. Inlet Valve	Lift of Valve					Cam Shaft Drive	Type of Cooling System	Type of Oiling System	Make	Fed by	Type	Used			Gear Ratio	Car Drives Through	Torque Taken By	Wheelbase In Inches	Make of Rims	Type of Rear Springs																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									



# Technical Specifications of Motor Trucks

## REVISED MONTHLY

**ABBREVIATIONS AND EXPLANATIONS:**—NAME AND MODEL—before name indicates the first time. PRICE—★, Including Body; —, Excluding Body. WHEELBASE—★, Other wheelbase lengths furnished at extra price; 1, Other wheelbase lengths furnished at same price. TIRES—PL, Pneumatic; S, Solid; St, Steel. MAKE OF REAR AXLE—Salisbury, Torb., Torbenson, Wisc., Wisconsin. TYPE OF REAR AXLE—F, Full Floating; S-F, Semi-Floating; D, Dead. MAKE OF ENGINE—Waukegan, Waukegan; Cont., Continental; Lyming, Lyming; Herc., Hercules; GB&S, Golden, Balkan & Swart, Wisc., Wisconsin. TYPE OF VALVE—R, Right; L, Left; O, Opposite; H, Head. COOLING SYSTEM—G, Gear; P, Pump; T, Thermosiphon; A, Air. RADIATOR—Fin, Finned Tubes; Sq, Square; Tubular, Tubular; V, Vertical; H, Hand Advance; S, Single; A, Automatic; E, Elasm; Hel, Helical; Ring, Tubes arranged in Ring about Blower Fan. IGNITION—F, Fly; Br, Ign. Bezel; Al-K, Atwater-Kent; Al-Ch, Allis-Chalmers; U. S. L., United States L. & Heat Co.; N-K, Niles; Split-App, Split-App; Splid, Splid; Con, Connecticut; West, Westinghouse; G-D, Gray & Davidson; F, Ford; B-T, Boring & Beck Co.; B-L, Brown-Lipe; Chil, Chilton; C, Climax; Cot, Cotta Transmission; Ray, Rayfield; Stumbg, Stumbg; Shakspeare, Shakspeare; Flech, Fletcher; Zen, Zenith; Johns, Johnson; King, Kingston; G, Gravity; V, Vacuum; P, Pressure. CLUTCH TYPE—D-D, Dry Disc; P, Plate. MAKE OF CLUTCH, UNIVERSAL JOINTS AND GEARS—Acme, Acme; Ar, Arvo; B-Co, Boring & Beck Co.; D, Detroit Gear & Machine Co.; M & E, Merchants & Engineers; Mun, Muncie Gear Works; Nort, Northway; Nor, Norwalk Auto Parts Co.; Pet, Peters Machine & Mfg. Co.; S, Snee, Snee & Co.; Spi, Spicer Mfg. Corp.; Thet, Thermoid Rubber Co.; U-M, Unit with Motor; U-J, Unit with Jackshaft; U-X, Unit with Axle. FINAL DRIVE—Int-G, Internal Gear; Chn, Chain; Sp-B, Spiral Bevel Gear; D-Red, Double Reduction Gear; S, Spur Wheel; 4, on all Four Wheels; W, Worm. \*Longer wheelbase offered at extra cost. †Other sizes optional. ‡Price including body.

NAME AND MODEL	WHEELBASE	TIRES				WHEELS				RUNNING GEAR				ENGINE				STARTING & LIGHTING SYSTEM				GEARSET				Final Drive	Chassis Price																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		Kind	Front Size	Rear Size	Rear Blame	Front of Spokes	Width of Spokes	Rear of Spokes	Rear Hub	Front of Spokes	Width of Spokes	Rear of Spokes	Front of Spokes	Width of Spokes	Rear of Spokes	Type of Rear Axle	Make of Engine	No. of Cylinders	Bore and Stroke in Inches	N. A. G. C. H. P.	Cylinder Head Location	Cooling System	Radiator Type	Ignition System and Spark Advance	Make			Extra Cost	Make of Governor	Make of Carburettor	Size of Carburettor	Type of Feed	Make of Clutch	Make of Universal Joints	Location	Speeds	Total Gear Reduction in High																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
A & B	10,000 144	48x134	48x134	48x134	48x134	12	10	10	10	12	10	10	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	



[illegible]



[illegible]



[illegible]



[illegible]



[illegible]







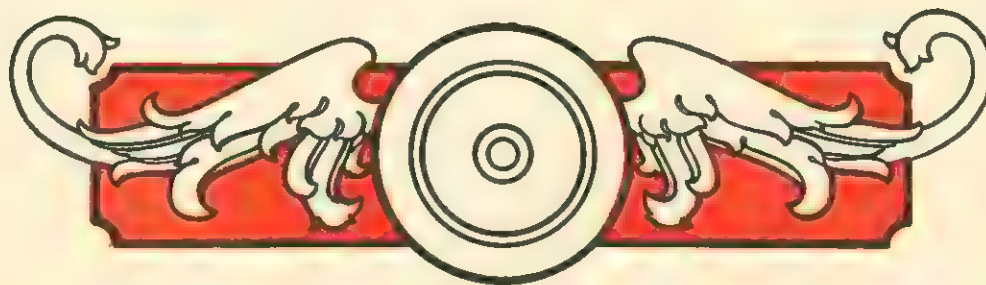
[illegible]



[illegible]



# Passenger Cars *and* Motor Trucks





## ATTERBURY

### SPECIFICATIONS OF ALL MODELS

**CHASSIS WEIGHT**— $1\frac{1}{2}$  ton, Model 20-R, 4,500;  $2\frac{1}{2}$  ton, Model 22-C, 5,670;  $3\frac{1}{2}$  ton, Model 22-D, 7,500; 5 ton, Model 8-E, 9,496.

**BODY WEIGHT ALLOWANCE**— $1\frac{1}{2}$  ton, Model 20-R, 1,250;  $2\frac{1}{2}$  ton, Model 22-C, 2,000;  $3\frac{1}{2}$  ton, Model 22-D, 2,500; 5 ton, Model 8-E, 2,500.

**SPEED ON SOLIDS**— $1\frac{1}{2}$  ton, Model 20-R, 20 M.P.H.;  $2\frac{1}{2}$  ton, Model 22-C, 18 M.P.H.;  $3\frac{1}{2}$  ton, Model 22-D, 15 M.P.H.; 5 ton, Model 8-E,  $12\frac{1}{2}$  M.P.H.

**SPEED ON PNEUMATICS**— $1\frac{1}{2}$  ton, Model 20-R, 22 M.P.H.;  $2\frac{1}{2}$  ton, Model 22-C, 19.5 M.P.H.;  $3\frac{1}{2}$  ton, Model 22-D, 16.5 M.P.H.

**MOTORS**—CONTINENTAL— $1\frac{1}{2}$  ton, Model 20-R, J-4;  $2\frac{1}{2}$  ton, Model 22-C, K-4;  $3\frac{1}{2}$  ton, Model 22-D, L-4; 5 ton, Model 8-E, B-2.

**BORE AND STROKE**— $1\frac{1}{2}$  ton, Model 20-R,  $3\frac{3}{4}$  by 5;  $2\frac{1}{2}$  ton, Model 22-C,  $4\frac{1}{4}$  by  $5\frac{1}{4}$ ;  $3\frac{1}{2}$  ton, Model 22-D,  $4\frac{1}{2}$  by  $5\frac{1}{2}$ ; 5 ton, Model 8-E,  $4\frac{3}{4}$  by 6.

**CARBURETOR**—Zenith carburetor in all models.

**GOVERNOR**— $1\frac{1}{2}$  ton, Simplex;  $2\frac{1}{2}$  and  $3\frac{1}{2}$  ton, Pierce; 5 ton, Continental.

**IGNITION**—Magneto in all models.

**CLUTCH**—Multiple dry disc in all models.

**TRANSMISSION**— $1\frac{1}{2}$  ton, three speeds, unit power plant;  $2\frac{1}{2}$ ,  $3\frac{1}{2}$  and 5 ton, four speeds amidships.

**RATIOS**— $1\frac{1}{2}$  ton: final 7.75—1, second 13.17—1, first 31.0—1, reverse, 27.12—1;  $2\frac{1}{2}$  ton: final 9.25—1, third, 16.2—1, second 26.2—1, first 49.4—1, reverse 57.8—1;  $3\frac{1}{2}$  ton: final, 10.3—1, third, 18.4—1, second, 29.8—1, first, 55.2—1, reverse 66.1—1; 5 ton: final 11.6—1, third 17.4—1, second 32.9—1, first 62.0—1, reverse 74.6—1.

**DRIVE**—Worm in all models.

**AXLES**—Timken in all models.

**FRONT TIRES**— $1\frac{1}{2}$  ton, 34 by  $3\frac{1}{2}$ ;  $2\frac{1}{2}$  ton, 36 by 4;  $3\frac{1}{2}$  ton, 36 by 5; 5 ton, 36 by 5.

**REAR TIRES**— $1\frac{1}{2}$  ton, 34 by 5 single;  $2\frac{1}{2}$  ton, 36 by 4 dual;  $3\frac{1}{2}$  ton, 40 by 5 dual; 5 ton, 40 by 6 dual.

**WHEELBASE**— $1\frac{1}{2}$  ton, Std. 12 ft. (144 in.);  $2\frac{1}{2}$  ton, Std. 13 ft. (156 in.); Long 15 ft. (180 in.);  $3\frac{1}{2}$  ton, Std. 14 ft. 6 in. (174 in.); Long, 16 ft. 6 in. (198 in.), Short, 12 ft. 6 in. (150 in.); 5 ton, Std. 14 ft. (168 in.), Long, 16 ft. (192 in.).

**CAB**— $1\frac{1}{2}$  ton, open;  $2\frac{1}{2}$  ton, semi-enclosed;  $3\frac{1}{2}$  ton, semi-enclosed; 5 ton, open.

**LIGHTS**—Delco electric in all models.

**STANDARD FINISH**—Gray in all models.

ESTABLISHED 1903

**Atterbury Motor Car Company**  
BUFFALO, NEW YORK



## ATTERBURY MOTOR CAR COMPANY

### BUILDERS OF MOTOR TRUCKS EXCLUSIVELY SINCE 1903



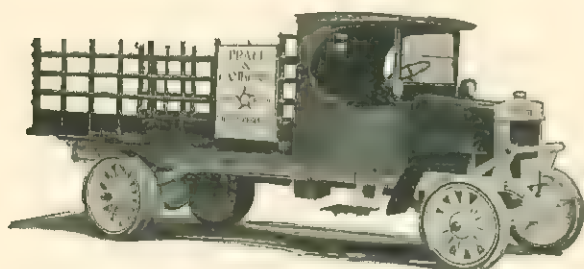
1 1/2 Ton, Model 20-R, \$2,475

Ample speed combined with the ever necessary ruggedness are just two of the reasons for the success of this model under the punishment of service. The worm drive, heavy flexible bolted frame, perfected J4 Continental motor and many other features all combine to maintain the prestige of the Atterbury reputation.



2 1/2 Ton, Model 22-C, \$3,375

All around suitability of carrying capacity coupled with dependable and economical performance has made the 2 1/2 ton Atterbury one of the most popular models. Two wheelbase lengths provide for a wide range of body sizes so that light bulky loads and materials of great length can be handled as profitably as material of greater tonnage in proportion to size.



3 1/2 Ton, Model 22-D, \$4,275

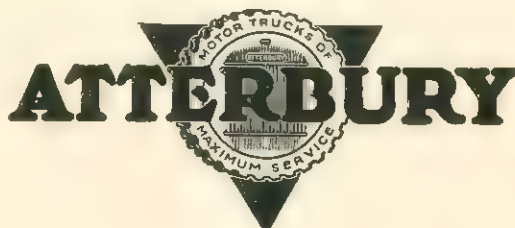
For general heavy duty work this big 3 1/2 ton Atterbury has the strength and power to stand up and produce. Likewise in interurban express service with long hauls at sustained speed owners have found this model ideal because of its capacity, stamina and dependability.



5 Ton, Model 8-E, \$4,975

When it's a matter of maximum tonnage and brute strength the 5-ton Atterbury is 100% there. Each of its 9,495 pounds has its particular work to do and working collectively they make up a unit that does business and eliminates worry. This is one of the reasons why this model has been selected by many of America's greatest industries.

The Atterbury franchise carries the permanent backing of one of the oldest motor truck manufacturers in the United States.



ESTABLISHED 1903

**Atterbury Motor Car Company**  
BUFFALO, NEW YORK



## COLE SPECIFICATIONS

### New Series 890

#### MECHANICAL FEATURES

**MOTOR**—Eight cylinder, high speed.  $3\frac{1}{2}$  in. bore,  $4\frac{1}{2}$  in. stroke. 346.4 cubic inch piston displacement. "L" heads removable, affording quick, easy access to valves and combustion chambers. Cylinder blocks and crank case cast in two section, divided vertically. Cam and pump shafts driven by helical gears. Counter-balanced crank shaft. Envelope manifold for increasing efficiency of fuel. Aluminum alloy constant clearance pistons. S. A. E. horsepower 39.22. Actual horsepower, more than 39.

**STARTING, LIGHTING, IGNITION**—Delco System.

**LUBRICATION**—Force feed, gear pump readily accessible from outside of motor; driven from crankshaft.

**CLUTCH**—Cole patented cone type, leather faced, with auxiliary springs under leather for easy engagement.

**STEERING**—18-in. corrugated solid walnut built up steering wheel and spider with walnut finish horn button and control disc. Irreversible type gear with ball thrust bearing.

**FRAME**—The new Ultramite frame is a channel section of special frame steel. Tapered at front to give shortest possible turning radius; widened at rear to afford rigid body support. Cole trunnion design with cross-members, at all points subject to strains.

**WHEELBASE**—127 $\frac{1}{4}$  inches.

**AXLES**—Rear, Cole improved three-quarter floating. Bevel gear differential. One-piece pressed steel housing. Front, special drop-forged and heat treated I-beam. Tapered roller bearings front and rear.

**BRAKES**—External contracting foot brakes,  $16 \times 2\frac{1}{4}$  inches. Internal expanding emergency brake,  $15\frac{1}{8} \times 2\frac{1}{4}$  inches. Special Cole construction and design.

**SPRINGS**—Cole direct drive spring suspension. Springs oil tempered, 39-inch semi-elliptic front,  $57\frac{1}{2}$ -inch semi-elliptic rear. Underslung in rear. Shackle bolts equipped with large oil cups and bronze bushings. Adjustable spring shackles. Special combined construction with Lovejoy Hydraulic Shock Absorbers, giving the wonderful Hydro-cushion spring action.

**TIRES AND RIMS**—Cord tires on all wheels. 33x5 inch tires front and rear, straight side, quick detachable rims.

**EQUIPMENT**—Motor-driven tire pump with air hose and gauge permanently attached. 75-mile speedometer. Waltham dash clock. Ammeter. Oil pressure gauge. Motometer. Electric motor-driven horn. Equipped with Lovejoy Hydraulic Shock Absorbers. Barrel type, head lamps with hand ground lenses. Twenty gallon gasoline tank with gauge. Complete outfit of tools.

WOOD, WIRE, OR DISTEEL WHEELS OPTIONAL ON ALL MODELS

## Cole Motor Car Company

INDIANAPOLIS, U. S. A.

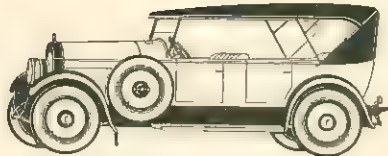


---

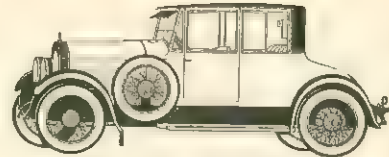
---

## COLE MOTOR CAR COMPANY

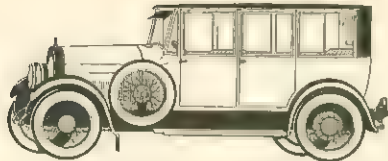
### New Series 890



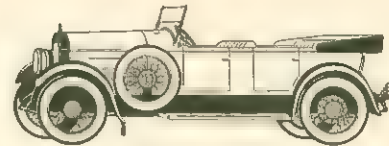
New Series Ultra-Equipped  
TOURSTER  
Seven Passenger  
\$2685



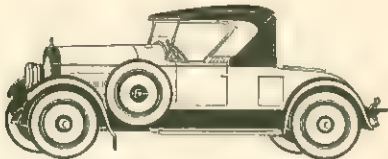
New Series Ultra-Equipped  
COUPE  
Four Passenger—All Aluminum Body  
\$3285



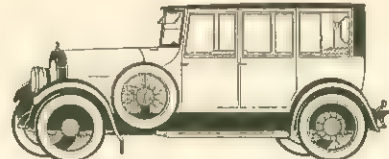
New Series Ultra-Equipped  
SEDAN  
Seven Passenger—All Aluminum Body  
\$3685



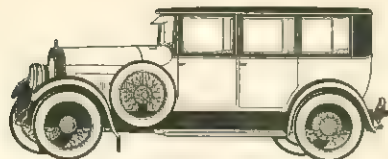
New Series Ultra-Equipped  
SPORTSTER  
Four Passenger  
\$2685



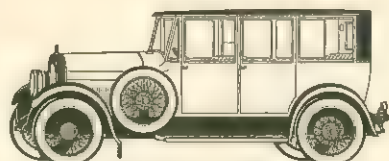
New Series Ultra-Equipped  
ROADSTER  
Two Passenger  
\$2685



New Series Ultra-Equipped  
SUBURBAN  
Five Passenger—All Aluminum Body  
\$3685



New Series Ultra-Equipped  
TOURSEDAN  
Seven Passenger  
\$3285



New Series Ultra-Equipped  
BERLINE  
Seven Passenger—All Aluminum Body  
\$3685

All prices at Indianapolis

**Cole Motor Car Company**  
INDIANAPOLIS, U. S. A.

---

---



## FEDERAL FAST EXPRESS SPECIFICATIONS

**CAPACITY**—2000 lbs.; body allowance 900 lbs.; chassis weight, 2950 lbs.; total, 5850 lbs.; wheelbase 132 inches; tread 56 inches; loading space back of seat 110 inches.

**MOTOR**—Continental J-4; 4 cylinders; L-Head; Mono Block type; 3-bearing crank shaft; 3-point suspension; force feed lubrication system through hollow crank shaft; bore, 3¾ inches; stroke, 5 inches; 30 horsepower at normal engine speed.

**IGNITION**—Eisemann Magneto with manually controlled spark.

**CARBURETOR**—Zenith; central jet, float feed, automatic.

**COOLING SYSTEM**—By fan and water circulated by centrifugal water pump of ample proportions through a Federal type detachable core radiator with pressed steel tanks and side members chemically treated to prevent rust.

**CLUTCH**—Borg & Beck dry plate; two 10 inch asbestos fabric discs enclosed in Bell housing; easily adjusted for wear.

**TRANSMISSION**—3 speeds forward and one reverse; selective; sliding; stub tooth; spur gear type; mounted on flywheel housing; splined main shaft; annular ball and roller bearings of generous size throughout.

**PROPELLER SHAFTS**—Tubular, provided with three Universal grease-tight joints of ample proportions. Supported at center of self-aligning ball bearings.

**REAR AXLE**—Timken-Detroit; worm drive with differential mounted on Timken-Roller bearings; semi-floating; completely enclosed in one-piece pressed steel housing; gear ratio standard 5.6 to 1.

**FRONT AXLE**—Timken-Detroit; drop forged I-beam; tapered roller bearings.

**BRAKES**—Internal duplex; expanding type; 15 inch x 2½ inch foot and emergency, each having four Raybestos faced shoes operating in drums on rear wheels.

**FRAME**—Pressed steel; channel section; 3-16 inch thick; 5 inch deep at center; 30½ inch wide at front and 34 inch wide back of seat; height from ground loaded, 29¼ inches.

**SPRINGS**—Chrome Vanadium steel; semi-elliptic type; front, 38 inches x 2¼ inches; rear, 50 inches x 2¼; 8 leaves rear.

**STEERING GEAR**—Gemmer irreversible type; worm and worm wheel; ample adjustment for wear; bearings of generous size; 18 inch hand wheel.

**GASOLINE SYSTEM**—Sheet steel tank; 12¼ gallons; tinned inside and out; mounted on chassis under seat, with Stewart vacuum tank on dash under hood.

**WHEELS**—Dished and tapered demountable disc wheels; valve connection outside.

**TIRES**—Pneumatic U. S. Royal cords; truck type; non-skid; 33 x 5 inches front and rear.

**CONTROL**—Transmission and brake levers mounted on transmission housing, center of chassis; steering gear column on left; accelerator pedal on toe board; hand throttle and spark control lever on steering column; ignition switch and carburetor choke are provided on the dash.

**CHASSIS LUBRICATION**—Alemite grease connections with efficient high pressure grease gun; no grease cups to be filled by hand.

**DASH EQUIPMENT**—Dash, toe boards, fenders and running boards heavy pressed steel, floor board wood.

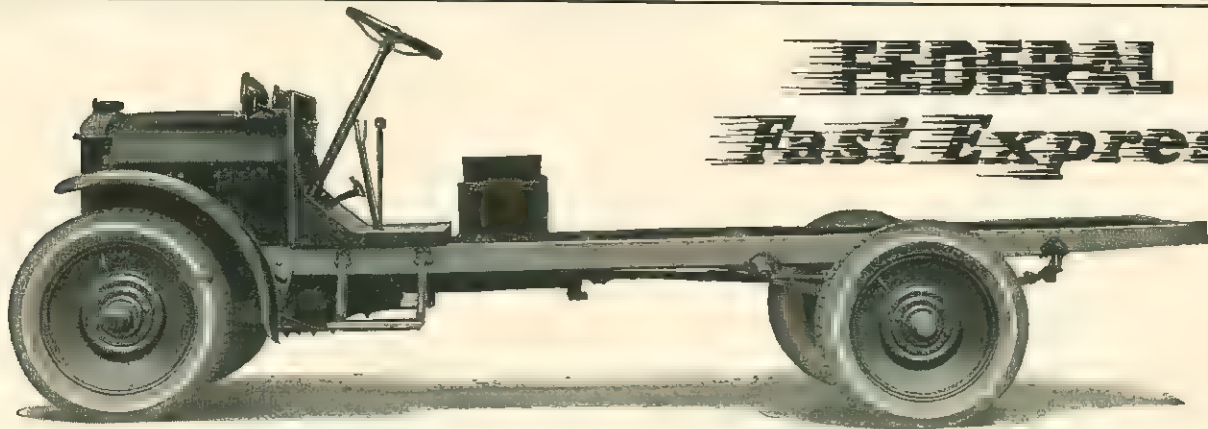
**ELECTRIC EQUIPMENT**—Remy electric starter and generator; electric horn; electric side, tail and dash lights with special hard service battery mounted under seat, easily accessible.

**CHASSIS PRICE**—\$1375 f. o. b. Detroit, freight and war tax additional. Price includes complete set of tools, jack, oil can and hand pump.

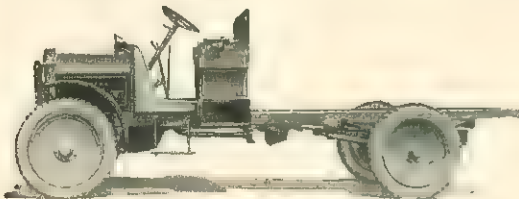
This Federal Fast Express completes a line that now satisfies every haulage requirement. It opens the 65% light delivery truck market to alert Federal Dealers. A wire or special delivery letter concerning territories will have immediate attention.

**Federal Motor Truck Company**  
DETROIT, U. S. A.





## There is a Federal Truck for every Hauling Need



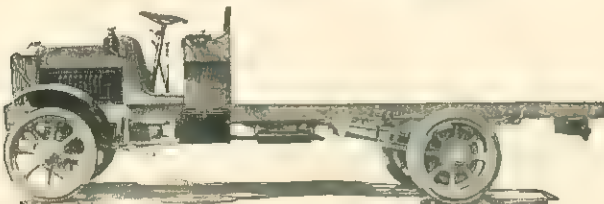
Federal Model "SD"—2000 pounds capacity, Wheelbase, 132"; 30 H.P. Motor.



Federal Model "TE"—3000 pounds capacity, Wheelbase, 144"; 35 H.P. Motor.



Federal Model "UE"—4000 pounds capacity, Wheelbase, 136", 144" or 156" and Special 168"; 35 H.P. Motor.



Federal Model "WE"—7000 pounds capacity, Wheelbase 156" and Special 180"; 40 H.P. Motor.



Federal "X2"—10,000 pounds capacity, Wheelbase, 156" and Special 180"; 50 H.P. Motor.

With the addition of the Fast Express to the Federal line, Federal dealers are enabled to satisfy the trucking requirements of every prospect.

The Fast Express is the biggest little truck on the market. Of truck type construction all the way through; it has a capacity of at least one ton, a speed of 35 miles per hour and can be fitted with any one of 32 body combinations.

The other members of the Federal family include units up to seven tons capacity, several of standard and special wheelbase lengths.

The Federal line is designed to reach every prospect whether in the fast, light delivery field or in heavy duty hauling.

Every live dealer knows what this means—the certainty that he can figure with every possible buyer. Your territory may be open. Write us today.

*Another*  
**FEDERAL**

**FEDERAL MOTOR TRUCK COMPANY**  
**DETROIT, U. S. A.**



# GENERAL MOTORS TRUCK COMPANY SPECIFICATIONS

**LOAD CAPACITY**—Model K16, 2,000 pounds with 900 pounds body allowance; Model K41, 4,000 pounds with 1,500 pounds body allowance; Model K71, 7,000 pounds with 2,000 pounds body allowance; Model K101, 10,000 pounds with 2,500 pounds body allowance.

**ENGINE**—GMC design and manufacture, 4-cylinder, L-head, water cooled. Model K16, bore  $3\frac{1}{2}$  inches, stroke  $5\frac{1}{2}$  inches; Model K41, bore 4 inches, stroke  $5\frac{1}{2}$ ; Model K71, bore  $4\frac{1}{2}$  inches, stroke 6 inches; Model K101, bore  $4\frac{1}{2}$  inches, stroke 6 inches.

**HORSEPOWER**—Model K16 by S. A. E. formula, 19.6; actual horsepower at governed speed 32.5. Model K41, by S. A. E. formula, 25.6; actual at governed speed 37. Model K71 and K101 by S. A. E. formula 32.4; actual at governed speed 51.

**CYLINDER AND CRANK CASE**—Cast in unit. Cylinders, removable sleeve type.

**LUBRICATION**—Positive pressure system from gear pump, forcing oil with constant pressure to all bearings of engine. Chassis lubrication by pressure gun system.

**GOVERNOR**—Fly ball type of our own manufacture.

**CARBURETOR AND FUEL SUPPLY**—GMC two jet type carburetor with special heated intake manifold. Fuel by gravity from pressed steel tank.

**COOLING**—Combination pump driven and thermo-syphon.

**RADIATOR**—Continuous fin, tubular, type.

**IGNITION**—High tension magneto, impulse starter coupling used in Models K41, K71 and K101.

**CLUTCH**—Multiple disc dry plate type of our own manufacture.

**TRANSMISSION**—Model K16, GMC 3-speed selective type in unit with engine. Model K41, GMC selective 2-range transmission, each range having 4 forward speeds and one reverse, in unit with engine. Model K71 and K101, GMC selective 2-range transmission, each range having 4 forward speeds and one reverse; transmission suspended amidship. Provision for power take-off and tire pump on all models.

**REAR AXLE**—Model K16,  $\frac{3}{4}$  floating, bevel pinion drive with 6. to 1 gear ratio. Model K41, worm drive full floating, with gear ratio 7.25 to 1. Model K71, worm drive full floating with gear ratio 8.75 to 1. Model K101, worm drive full floating, with gear ratio 10 to 1.

**RADIUS ROD**—Drive in all models through radius rod from rear axle to frame.

**FRAME**—Model K16 pressed steel, re-inforced Model K41, K71 and K101, pressed open hearth steel, heat treated.

**BRAKES**—Model K16, external contracting for service, internal expanding for emergency. Models K41, K71 and K101 service and emergency both internal expanding, interchangeable brake rods on all models.

**WHEELS**—Model K16 steel felloe with 12 interlocking wooden spokes. Models K41, K71 and K101 metal hollow spoke type.

**TIRES**—Model K16, 34x5 non-skid cord pneumatics all around. K41, solid single, 36x4 front, 36x7 rear; Model K71, solid 36x5 front, single 40x5 rear, dual. Model K101 solid, 36x5 front single, 40x5 dual rears. Pneumatic tires for Model K41 and K71 supplied at extra cost.

**WHEELBASE**—Model K16 132 inches. Model K41A 146 inches. K41B, 158 inches. Model K71A, 163 inches; K71B, 187 inches. Model K101A, 163 inches; K101B, 187 inches.

**MAXIMUM BODY LENGTH**—Model K16, 100 inches; Model K41A, 11 $\frac{1}{2}$  feet; K41B, 13 $\frac{1}{2}$  feet; Model 71A, 14 feet; K71B, 18 feet; Model K101A, 14 feet; B, 18 feet.

**ROAD CLEARANCE**—Rear axle—Model K16—8 $\frac{3}{4}$  inches; Model K41, 9 $\frac{1}{2}$  inches solid, pneumatic 12 inches; Model K71, 10 $\frac{1}{2}$  solid, pneumatic 12 $\frac{3}{4}$  in. Model K101, 9 $\frac{3}{4}$  solid.

**TURNING RADIUS**—Model K16—23 feet. Model K41A, 28 $\frac{1}{2}$  feet; Model K41B, 31 feet; Model K71A, 27 $\frac{1}{2}$  feet; K71B, 35 feet; Model K101A, 27 $\frac{1}{2}$  feet; K101B, 35 feet.

**WEIGHT OF CHASSIS**—Model K16, 3,250 pounds. Model K41A, 5,245 pounds. Model K41B, 5,285 pounds. Model K71A, 7,945 pounds. Model K71B, 8,070 pounds; Model K101A, 8,645 pounds. Model K101B, 8,770 pounds.

**CONTROLS**—Left hand steering and center control. Spark and throttle levers located on segment with connections outside of steering column. Foot throttle operated by driver's right foot. Ignition and light switches, oil gauge, ammeter and choker throttle located in instrument case on dash.

**EQUIPMENT**—Electric head lamps, electric tail lamp, generator, storage battery, on all models. Electric starter standard equipment on Model K16 and supplied at extra cost on other models. Horn, tool kit and jack.

## General Motors Truck Company

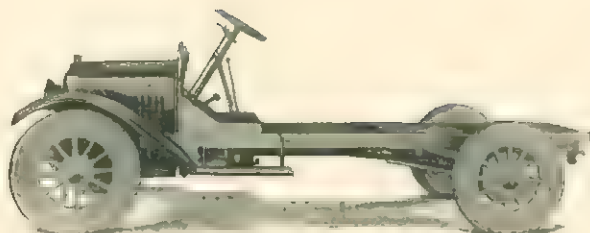
*Division of General Motors Corporation*

PONTIAC, MICHIGAN



## GENERAL MOTORS TRUCK COMPANY

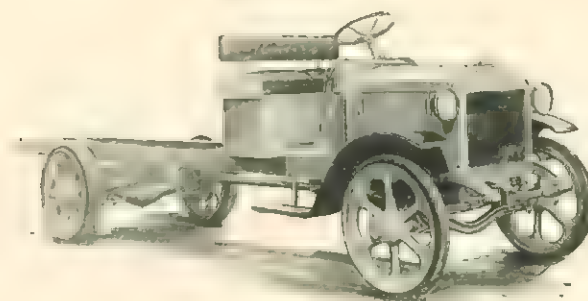
### K Series Models



Model K-16 1 Ton

\$1,295

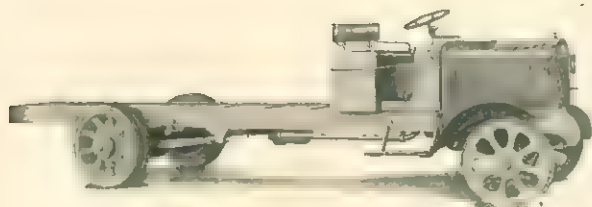
This model is the successor to the famous Model 16, GMC, which was adopted as the standard  $\frac{3}{4}$  ton motor truck for the U. S. Army, and which served as the ambulance chassis in France.



Model K-41 2 Ton

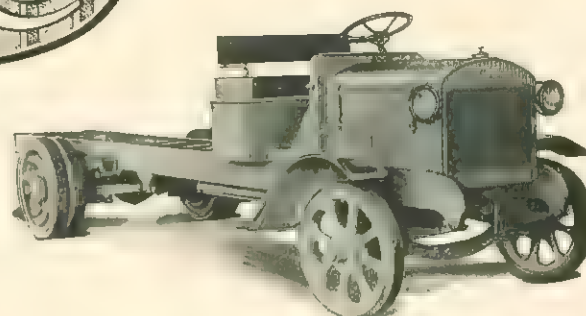
\$2,375

Because of the GMC 2-range transmission, this 2-ton truck operates at a governed road speed of 18 miles an hour on solid tires or 24 miles an hour on pneumatic tires.

Model K-71  $3\frac{1}{2}$  Ton

\$3,600

This  $3\frac{1}{2}$ -ton truck develops 66.92 per cent more gear reduction in low gear and 22.3 more speed in direct drive than is averaged by five other leading  $3\frac{1}{2}$ -ton trucks.



Model K-101 5 Ton

\$3,950

This 5-ton model for heavy duty service has a gear reduction of 86 to 1 in low speed of the low range. This is nearly 50% more than the average of trucks of the same capacity.

*Prices quoted are for Chassis only, at the factory;  
Tax to be added*

## General Motors Truck Company

*Division of General Motors Corporation*

PONTIAC, MICHIGAN



## GRAMM-PIONEER 4-TON TRUCK SPECIFICATIONS

**RADIATOR**—Gramm-Pioneer cast tank and tubular (all copper) type with rear shroud. Very efficient.

**RADIATOR SHUTTER** manually controlled from driver's seat.

**MOTOMETER**—to indicate temperature of engine. Radiator attached to frame with springs.

**RADIATOR GUARD**—of exceptionally rugged construction fastened to frame independent of radiator.

**MOTOR**—Liberty Truck type, most efficient, highest quality power plant known. 4 cylinder with removable heads in pairs, cast en bloc, 3 point suspension, L head with enclosed valves, extra large water jackets,  $4\frac{1}{2}$  in. bore,  $5\frac{1}{2}$  in. stroke. Brake H.P. 50.

**COOLING SYSTEM**—Centrifugal pump.

**LUBRICATION**—Constant pressure by gear driven pump.

**CARBURETOR**—Stromberg  $1\frac{1}{4}$  heated by hot air from exhaust pipe and hot-spot manifold. 2 adjustments.

**GOVERNOR**—Built integral with motor, fly-ball type.

**IGNITION**—Eisemann dual. Manually operated spark control.

**FAN**—Diameter 18 in. driven by 2 in. flat belt with eccentric adjustment.

**GASOLINE SUPPLY**—Gravity feed operating through Gramm's patent fuel economizer. 30 gal. tank under seat with outside gauge and filler pipe.

**STARTING MOTOR**—North East (extra).

**LIGHTING**—Electric. North East generator and Exide heavy truck type battery. Two side lights with dimmers and non-glare lenses. Instrument board light, bull's eye tail light, recessed and protected in frame.

**STEERING GEAR**—Ross, fore and aft steer, worm and nut type. 22 in. wheel—very staunch and easy handling.

**CLUTCH**—Gramm-Pioneer multiple disc, dry plate, with compression spring, fully enclosed in unit with engine. Oilers with pipes leading to clutch throw-out and pilot bearings mounted on control in plain view of driver.

**CONTROL**—Center, with locking device, insuring against engaging two speeds at the same time.

**TRANSMISSION**—4 speeds forward, 1 reverse. Gramm-Pioneer patent, located amidships. Positive jaw clutch type, gears assembled on a six splined shaft and always in mesh. No pins, studs or screws used.

**GEAR STRIPPING IMPOSSIBLE**—Material in gears, jaws and shafts highest grade chrome nickel steel. Transmission 3-point suspension, with front third I-beam trunioned to frame side members. Rear suspension arms trunioned to ample pressed steel integral and deep gusseted cross members. Oil filler pipe extended to enable filling from

outside of frame. Transmission provided with pad to take "geared power take-off" for driving hydraulic hoist, power winch, etc. (B. A. Gramm's patent No. 1194994). Separate pad for power tire pump.

**DRIVE**—Hotchkiss. Increases efficiency, eliminates crystallization of axles and frames, cuts down spring breakage and other repair bills.

**PROPELLOR SHAFTS**—G.P. flexible disc type 2-bolt construction universal joints. No lubrication required. Front, 8 in. dia.; rear, 10 in. dia.

**FRONT AXLE**—Twice heat treated I-beam drop forging, taper roller bearings in wheels. Big thrust bearing in yoke. Very easy steering.

**REAR AXLE**—Worm drive, semi-floating type. Extra large bearings—improved type of lubrication.

**BRAKES**—Service,  $21 \times 2\frac{3}{4}$  in. internal expanding; emergency,  $21 \times 2\frac{3}{4}$  in. internal expanding; both operating on rear wheels. All brakes equalized. Brake tumbler shafts operate in graphited oilless bushings requiring no attention.

**SPRINGS**—Front,  $46 \times 3$ ; rear,  $62 \times 3\frac{1}{2}$ ; semi-elliptic, cupped type to prevent slipping, all leaves Chrome Vanadium steel. Second leaf full wrapped around driving eye. All springs have bronze bushed eyes and Gramm-Pioneer patented wick oilers in hardened and ground spring bolts instead of grease cups. Springs designed to carry flat under rated load. Rear shackles bronze bushed.

**WHEELS**—Cast metal. Insure greater tire mileage. Obviates loose spokes in dry sections.

**TIRES**—Front,  $36 \times 5$  in. single. Rear,  $40 \times 5$  in. dual;  $40 \times 10$  in. single at extra cost.

**FRAME**—Semi-flexible construction. Highest grade pressed steel,  $7\frac{1}{2} \times 3 \times \frac{3}{4}$  in. channel, 36 in. wide. 5 cross members with integral gussets and heavy diagonal braces to avoid longitudinal stresses. "V" member in rear.

**CAB**—Gramm-Pioneer standard, with doors, storm curtains and exceptionally rugged metal ventilating windshield.

**SHEET METAL PARTS**—Fenders, pressed steel.

**FENDER BRACES**—Channel steel, Gramm-Pioneer design.

**STEPS**—Channel steel, Liberty Truck type.

**HOOD**—Extra heavy gauge with louvers in side. Hood hinges are separate riveted-in pattern. Hand grip hood clip, Liberty Truck type.

**MISCELLANEOUS**—Jack and tools furnished. Wheelbase, standard 156 in. Long standard, 174 in. Loading space, standard 144 in. Long standard, 180 in. Turning radius, 31 feet. Road clearance, 10 $\frac{1}{2}$  in. Chassis weight, 6900 lbs. Governed speed on high gear, 16 $\frac{1}{2}$  M.P.H. with standard ratio, 15 M.P.H. with optional ratio. Low gear, 21 M.P.H. both ratios. Body allowance 2,000 lbs.

Manufacturer reserves the right to alter specifications in the interest of improvement.

Pioneer Since 1901

"The Recognized Standard of Quality"

**The Gramm-Bernstein Motor Truck Company**  
LIMA, OHIO, U. S. A.



---



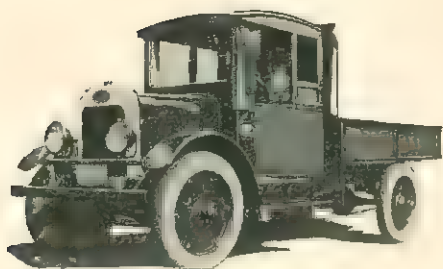
---

## "THE RECOGNIZED STANDARD OF QUALITY"

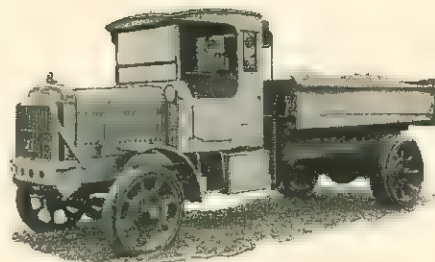
---



---



*One Ton Dump, Hand and Mechanically Operated.*

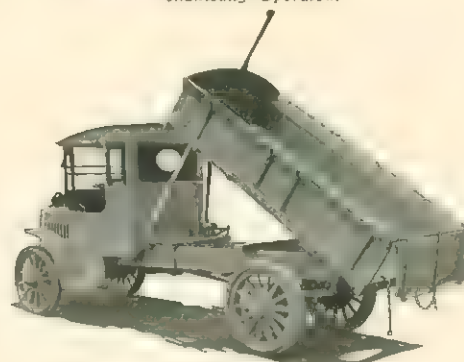


*2, 3, 3½, 4 and 5-6 Ton Heavy Duty Dump. Mechanically Operated.*



*1½, 2, 3, 3½, 4 and 5-6 Ton Elevating Dump. Hand and Mechanically Operated.*

**Increase  
Your  
Profits  
Through  
Seasonable  
Merchandising**



*"4 in 1" Elevating Dump, 1½ and 2 Ton. Hand and Mechanically Operated.*

With the coal and railroad strikes settled and empty coal bins yawning everywhere, there has come an insistent and increasing demand for winter coal.

This then is the time to interest owners of "wagon mines," wholesalers and retail yards, in suitable motor trucks.

Not only can more coal be delivered per day with Gramm-Pioneer trucks, but it can be hauled for less per ton than by team.

Also Gramm-Pioneer trucks will haul through heavy snow when horses cannot work at all.

Our line is complete with 1 to 6 ton capacities and can be promptly furnished with dump and elevating bodies, both hand and mechanically operated.

**Also attention is called to our new eleven passenger char-a-banc at \$2,400 as an all season seller, for which right now there is an active demand.**

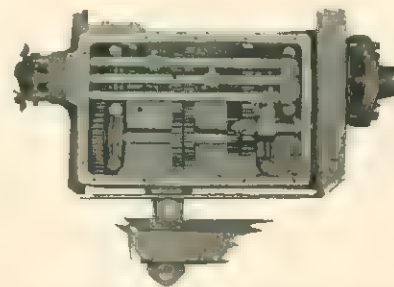
The Gramm-Pioneer line is thoroughly complete as to capacities and equipment, enabling the dealer to meet any demand.

It is "The Recognized Standard of Quality."

It is well advertised, attractively priced and easily sold at a profit.

Live dealers should get our proposition while it is available. Write us today.

*Besides the service parts carried by our individual dealers, the specialized units used in Gramm-Pioneer trucks can be had promptly through over 100 general parts stations distributed throughout the country.*



*Gramm-Pioneer Trouble-proof Transmissions are only costing all users an average of 32c per annum for upkeep.*

## The Gramm-Bernstein Motor Truck Company

LIMA, OHIO, U. S. A.

Pioneers Since 1901

---



---



## HUPMOBILE SERIES R SPECIFICATIONS

**BODY TYPES**—Five-passenger touring; two-passenger roadster; two-passenger roadster-coupe; five-passenger sedan; four-passenger coupe.

**WHEELBASE**—112 inches. Tread, 56 inches.

**CYLINDERS**—Four, cast en bloc, removable head;  $3\frac{1}{4}$ -inch bore by  $5\frac{1}{2}$ -inch stroke. Piston displacement  $182\frac{1}{2}$  cubic inches.

**STARTING AND LIGHTING**—Two unit system. Automatic starter release.

**IGNITION**—Generator-battery type.

**CARBURETOR**—Adjustments for "idling" and economy.

**GASOLINE SYSTEM**—Vacuum feed. Fifteen-gallon tank, including two-gallon reserve.

**COOLING**—Thermo-syphon.

**LUBRICATION**—Pressure system direct to bearings. Gear pump driven from camshaft.

**CLUTCH**—Dry disc type. Seven steel plates, fabric faced.

**TRANSMISSION**—Selective type. Three speeds forward and one reverse. Unit with motor.

**REAR AXLE**—Three-quarter floating type. Spiral bevel gears.

**STEERING**—Screw and half-nut type; semi-irreversible. 16-inch wheel.

**BRAKES**—Two sets, emergency and service, on rear wheels.

**SPRINGS**—Semi-elliptic; front,  $26\frac{1}{2}$  inches long; rear,  $51\frac{1}{2}$  inches.

**TIRES**—32 x 4 inches, straight side "all-weather" cord.

**WEIGHTS**—Approximate: touring 2590 pounds; roadster 2490 pounds; roadster-coupe 2600 pounds; sedan 2965 pounds; coupe 2745 pounds; fully equipped ready for shipping (does not include oil, water and gasoline.)

**WHEELS**—Wood. (Wire or disc wheels at extra cost.)

**RIMS**—Five; demountable.

**COLOR**—Hupmobile blue body. Black hood, fenders and running gear.

**UPHOLSTERY**—Genuine leather—Sedan and Coupe: high grade fabrics—with very deep back and cushion springs.

**STANDARD EQUIPMENT**—In addition to above includes windshield with cleaner; head, rear, and instrument board lights, non-glare lenses; gasoline gauge; oil pressure gauge; horn; speedometer; ammeter; tire carrier; grease gun; pump; jack; set of tools. Touring and roadster have top with plate glass back window.

**SPECIAL EQUIPMENT**—For sedan and coupe; Windshield visor, car heater, rebound snubbers, step plates, rubber pedal pads. Sedan has robe rail, foot rests and dome light. Corner lights in coupe and dome light in roadster-coupe.

To protect ourselves in our constant endeavor to make the Hupmobile even better than it is, we reserve the right to change specifications and prices without notice, or to use equipment other than that specified.

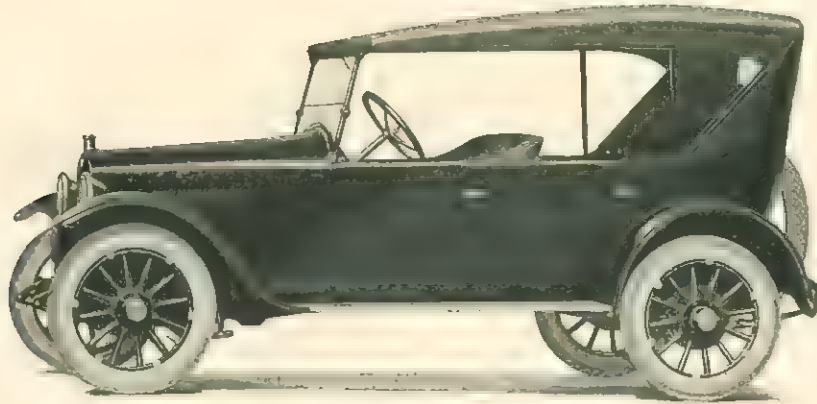
**Hupp Motor Car Corporation**  
DETROIT, MICHIGAN

Jackson

Racine

Windsor





Touring Car \$1150  
Seating five passengers comfortably. The car of the American family.



Roadster \$1150  
For two persons, desiring smartness and chumminess in a car.



Roadster-Coupe \$1335  
Ideal for business usage, having sufficient carrying space for samples, etc.



Coupe \$1635  
Preferred by women drivers for its beauty and comfort.



Sedan \$1785  
A car of quality and refinement, with full five passenger capacity.

Prices f. o. b. Detroit  
Revenue tax extra

# Hupmobile



## PACKARD SPECIFICATIONS

### SINGLE-SIX

Packard Single-Six cars are made in eight models and two wheelbase lengths. Chassis specifications are practically the same for all models.

**MOTOR**—6 cylinders, cast en bloc. 3-point suspension.

**CYLINDERS**—L-head type. Bore  $3\frac{3}{8}$  inches. Stroke 5 inches.

**HORSEPOWER**—S. A. E. rating 27.34. Block test shows over 54.

**CRANK SHAFT**—7 bearings to insure rigidity.

**IGNITION**—Generator, battery and Packard-Delco distributor.

**SPRINGS**—Semi-elliptic front and rear. Front 38 inches long, 2 inches wide. Rear 54 inches long,  $2\frac{1}{4}$  inches wide.

**BRAKES**—Internal emergency and external service. 14-inch drums.

**STARTING AND LIGHTING**—Atwater-Kent.

**WHEELBASE**—126-inch and 133-inch.

**TIRES**—Cord,  $33 \times 4\frac{1}{2}$  inches, rib tread front and non-skid rear.

**PAINTING**—Open models: Packard Town Car blue, medium, striped with gold. Enclosed models: Above belt, black. Below belt, standard Packard blue, striped with gold.

### TWIN-SIX

Packard Twin-Six cars are made in eight models, all on one wheelbase. Chassis specifications are practically the same for all models.

**MOTOR**—"V" type, 12 cylinders, arranged in blocks of 6 at an angle of 60 degrees, four-point suspension.

**CYLINDERS**—"L" head type, bore 3 inches, stroke 5 inches.

**HORSEPOWER**—43.2 S. A. E. rating. Block test, actually develops over 75 H.P.

**IGNITION**—Generator, battery and Packard-Delco distributor.

**BRAKES**—Internal emergency and external service brakes on 17 inch drums.

**WHEELBASE**—136 inches.

**STARTING AND LIGHTING**—Packard-Bijur.

**SPRINGS**—Semi-elliptic, front 41 inches long and  $2\frac{1}{4}$  inches wide. Rear, semi-elliptic, 60 inches long and 3 inches wide.

**TIRES**— $35 \times 5$  inch, cord.

**PAINTING**—Open models: Standard Packard blue, striped with black. Enclosed models: Standard Packard blue, striped with cream yellow.

### TRUCKS

Packard trucks are made in four models, ranging in capacity from 4,000 to 15,000 pounds.

**MOTOR**—4-cylinder, of Packard design and manufacture. 3-point suspension.

**CARBURETOR**—Special Packard design. Intakes equipped with "shut-offs" to facilitate starting in cold weather.

**SPEED GOVERNOR**—Centrifugal governor limits maximum truck speed. Sealed to prevent tampering.

**LUBRICATION**—Gear driven pump supplies oil under pressure.

**IGNITION**—High tension magneto, with battery for starting.

**SPRINGS**—Semi-elliptic, front and rear. Sizes variable with capacity ratings.

**BRAKES**—Service brake operates on drum at rear of transmission. Hand brakes are mounted on rear wheels.

**STEERING**—Worm and wheel type. Readily accessible and easily adjusted.

**FINAL DRIVE**—Work drive, of Packard design and manufacture. Provision is made for the constant lubrication of all bearings.

**FRAME**—Rolled steel channel section with tubular cross members, reinforced by gusset plates and angle irons.

NOTE—The right is reserved by the Packard Motor Car Company to make changes and improvements at will without incurring the obligation to install same on cars previously sold.

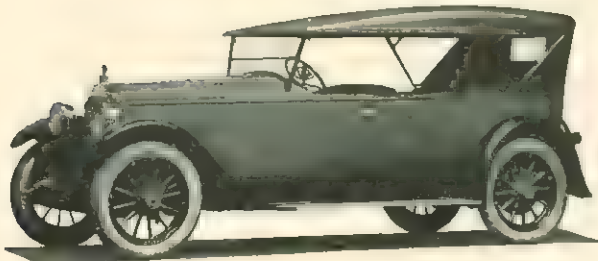
## Packard Motor Car Company

DETROIT, MICHIGAN

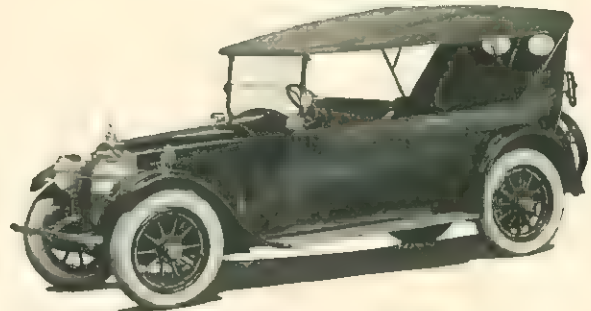


# PACKARD MOTOR CAR COMPANY

## TWIN-SIX      SINGLE-SIX      TRUCK



**1-Pass. Single-Six Touring**      **\$2,685**  
Upholstered completely in rich black leather. Comfortable auxiliary seats for two passengers. Nickered head lamps and radiator of new Packard design.



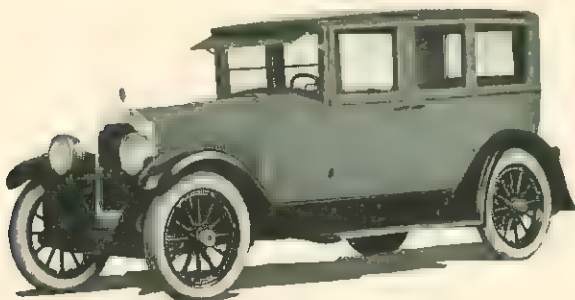
**Twin-Six Special Touring**      **\$4,100**  
A Twin-Six car individualized by the addition of heavy nickel equipment. Embodies all regular Twin-Six features. Seats seven passengers.



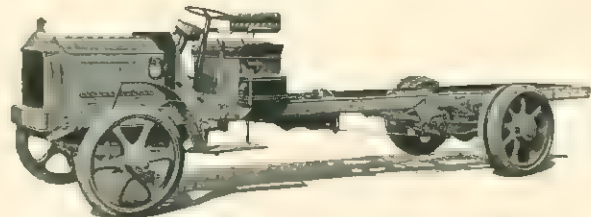
**4-Pass. Single-Six Coupe**      **\$3,175**  
One of the most spacious cars of its type on the market. Upholstered in smartly tailored cloth. Heavy plate glass doors and windows. Generous luggage space.



**Twin-Six Standard Touring**      **\$3,850**  
A famous example of Packard quality. Seats seven passengers. Upholstered in heavy, long-grained leather. Individually tailored curtains.



**7-Pass. Single-Six Sedan**      **\$3,525**  
A closed car of unusual beauty. Wide plate glass windows. Windshield and interior fittings, such as door handles, dome lights, robe rail, etc., of exclusive new design.



**Model ED Truck**      **\$4,100**  
Capacity 7,000 to 9,000 pounds, depending upon operating conditions. Powerful, dependable, long-lived, and economical in upkeep. Electric lights, standard.

**Packard Motor Car Company**  
DETROIT, MICHIGAN



# STEWART MOTOR CORPORATION SPECIFICATIONS OF 1922 MODELS THE UTILITY WAGON

**MOTOR**—Buda four cylinder monobloc, hot spot manifold, unusually economical, efficient and powerful. Bore and stroke  $3\frac{1}{4} \times 5\frac{1}{4}$  in. Horsepower, 21.03 S. A. E., actual horsepower 30 to 35. Three bearing crankshaft.

**LUBRICATING SYSTEM**—Full force pressure feed to all crankshaft, camshaft bearings and connecting rod bearings. Oil pressure gauge located on dash, telltale oil level gauge in crankcase.

**CARBURETOR**—Zenith automatic with dash starting adjustment; throttle controlled by foot accelerator. Also hand throttle on steering column.

**STARTING AND LIGHTING**—Remy generator direct driven from timing gears, 111 ampere hour storage battery. Headlights fitted with legal lenses and dimmers, electric tail light.

**IGNITION**—Remy battery ignition with high tension coil and engine driven distributor. Eiseman magneto optional, \$25.00 extra.

**COOLING SYSTEM**—Cast tank, armored type radiator, water pump circulation, 18 in. steel blade fan, driven by  $1\frac{1}{2}$  in. flat leather belt.

**TRANSMISSION**—Selective sliding gear with three speeds forward and one reverse. Unit power plant type bolted direct to engine. All gears  $3\frac{1}{2}\%$  nickel steel, heat treated, mounted on annular ball bearings. Center control with lever operating in ball and socket.

**CLUTCH**—Three plate dry disc, raybestos on steel.

**STEERING GEAR**—Screw and nut type, springs in connecting link to front axle for absorbing road shocks.

**PROPELLOR SHAFT**—Mechanical joint type having two Spicer joints which are enclosed in oil tight pressed steel housings. Drive shaft 2 in. outside diameter. The construction of this shaft provides for a 1 in. plus and minus slip as a take-up for spring action.

**FRONT AXLE**—Drop forged "I" beam section, height  $2\frac{3}{4}$  in.

and width  $1\frac{1}{4}$  in. Heavy spindles and unusually large taper roller bearings.

**REAR AXLE**—Clark high grade internal gear type, noted for strength, efficiency and quietness.

**SERVICE BRAKE**—External contracting type mounted on rear wheels, controlled by foot pedal. Drums 14 in. in diameter—bands Raybestos lined.

**EMERGENCY BRAKE**—External contracting type, mounted in rear of transmission, supported from cross member, controlled by hand lever—band Raybestos lined.

**SPRINGS**—Semi-elliptic front and rear with full length rebound plate, equipped with bronze bushings. Front springs  $37\frac{1}{2}$  in. long; rear springs 50 in. long. Alloy steel both front and rear.

**FRAME**—Pressed steel channel section, side rails 3-16 in. stock, depth side rails  $4\frac{1}{4}$  in. Three cross members gusseted.

**WHEELS**—Front and rear wheels artillery type. Twelve spokes in front, fourteen in rear.

**TIRES**—Pneumatic,  $34 \times 4\frac{1}{2}$  in. non-skid cord front and rear—demountable rims.  $35 \times 5$  in., special equipment, \$38.00 extra.

**WHEELBASE**—128 in. Tread 56 in.

**GASOLINE TANK**—Made of 18 gauge steel, terne coated inside and out, preventing rust. Round double lapped seams. Capacity approximately 14 gallons.

**TOE BOARDS**—Corrugated hard wood.

**CAPACITY**—For loads of 500 to 2,500 lbs.

**FINISH**—Chassis, running gear Stewart red; mud-guards black; hood, radiator and cowl, Napier green. All standard bodies Napier green, gold bronze striping.

**EQUIPMENT**—Electric horn, electric lights, electric starter, full set of tools, pump, front bumper. Extra rim.

**CHASSIS LUBRICATION**—Alemite system.

## Model 15

Maximum Load 3,000 lbs.

Latest Model 4 cylinder L-head type motor, 3 bearing crankshaft, Remy battery ignition, starting and lighting; Zenith carburetor; cast tank, armored type radiator; selective sliding gear type transmission; multiple disc clutch with automatic adjustment for wear; unusually strong front and rear axles; internal gear drive; rigidly braced frame, front member being easily removed; full accessory equipment. Alemite high pressure chassis lubricating system throughout. Wheel base 130 inches; tread 56 inches. Finish Stewart Red; fenders and running board black enamel.

## Model 7x

Maximum Load 6,000 lbs.

Horsepower 29 S. A. E., 3 point suspension unit power plant 4 cylinder L head cast in bloc motor,  $4\frac{1}{4}$  bore  $\times$   $5\frac{1}{4}$  stroke; three bearing crankshaft, force feed lubrication; ignition, high tension magneto with variable spark; automatic engine driven governor, solid straight line drive shaft; total gear ratios—Low, 43.2 to 1; second, 27 to 1; third, 14.1 to 1; high, 9 to 1; reverse, 53.5 to 1. Highest grade internal gear drive power is transmitted through live nickel steel shaft and gears. Frame designed for 11 and 12 foot bodies; full equipment; special long wheel base of 174 inches at small additional cost; finish Stewart red.

## Model 9

Maximum Load 4,000 lbs.

Horsepower 22-50 S. A. E. Four cylinder L-head type motor, 1 bearing crankshaft; constant level oiling system maintained by plunger pump; unit type power plant; three point suspension; Remy battery ignition with high tension coil and engine driven distributor (magneto optional, \$25 extra); Remy lighting system; (electric starting optional at added cost of \$40); Zenith carburetor; water circulation thermo-syphon; internal gear drive delivering more than 90% of the engine's power to the rear wheels. Frame suitable for ten-foot bodies; full accessory equipment; chassis painted standard Stewart red, fenders and running boards black.

## Model 10x

Maximum Load 8,000 lbs.

Horsepower 32.4 S. A. E., 4 cylinder L-head cast in bloc, three point suspension, high tension magneto, automatic ball type governor. Total gear ratios—Low, 43 to 1; second, 30 to 1; third, 16 to 1; high, 10 to 1; reverse, 65 to 1. Internal gear drive; frame suitable for 12 foot bodies; steel wheels; oilless bushings on countershaft; extra large brakes. Alemite lubricating system; worm and nut type, steering gear; wheel base 165 inches; special long wheel base 185 inches at nominal extra cost; tread, front, 50 inches, rear, 70 inches. Full equipment. Finish Stewart red, fenders and running boards black.

*All Prices f. o. b. Buffalo, N. Y.*

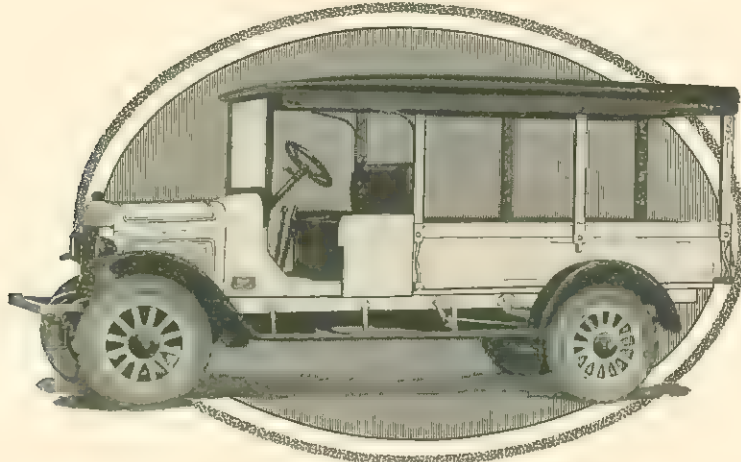
**Stewart Motor Corporation**  
BUFFALO, N. Y.



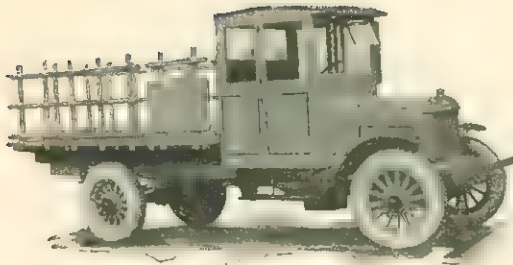
---

---

# Stewart Motor Corporation's 1922 Models



The "Utility Wagon"—Chassis \$1,245 F.O.B. Buffalo



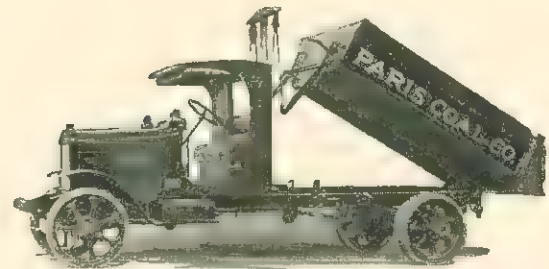
Model 15 Chassis—Price \$1,445  
Maximum Load 3,000 Lbs.



Model 9 Standard Chassis—Price \$1,700  
Maximum Load 4,000 Lbs.



Model 7x Chassis—Price \$2,390  
Maximum Load 6,000 Lbs.



Model 10x Chassis—Price \$3,190  
Maximum Load 8,000 Lbs.

*Write for interesting literature*

**Stewart Motor Corporation**  
BUFFALO, N. Y.

---

---



## *To the Dealer*

How many times have you lost the sale of a car or truck, when, in reply to your prospect's question to some dealer or garage man, "What do you think of this or that car or truck?" the answer has been: "It's a bunch of junk." Our investigation has shown that in 90 per cent of the cases where this answer has been made, it is because of lack of knowledge regarding that particular car or truck. It is safer to knock when you don't know, and for some reason or other, the human mind hates to acknowledge it doesn't know.

This Department is for the purpose of correcting that condition. It will be enlarged from month to month with the view of educating not only dealers in cars and trucks, but every garage, service station, and in fact, every type of firm in the automobile industry, to a knowledge of what the different cars and trucks look like and as to what they are made up of. This will produce for you, instead of knockers, unpaid salesmen, who will many times become more enthusiastic selling your product than those you pay.

If the car you are handling is not represented here you are losing a big bet, and we ask your cooperation to help us make your manufacturer see the value of having his goods displayed in this Department.

MOTOR RECORD, because of its specifications on cars, trucks and tractors, and its replacement data on all cars and trucks back to 1915, is consulted more frequently than any other paper in the field and it costs less to be represented here than elsewhere.

If you have found MOTOR RECORD valuable, tell your manufacturer so; he will be glad to know, for he wants to spend his money for advertising to the best advantage, and your voice will go a lot further than ours, for he knows you are unbiased.

**The Ferguson Publishing Co.**  
90 West Street                      New York

---

---



# Technical Specifications of Tractors

## REVISED MONTHLY

ABBREVIATIONS: TYPE—2-w., Two-wheel; 3-w., Three-wheel 4-w., Four-wheel; Creep., c or w., either tracks or wheels furnished; DRIVEN BY—rw., Rear Wheel; fw-d., Rear Wheel Double fw-d., Front Wheel Double; Sycom., Sycoming; Imp., Imperial; Wauk., Waukesha; Buff., Buffalo; H-sp., Herschel Spillman; T-win Cy., Twin City; Auto., Automatic; Kerm., Kermath; Herc., Hercules; Wisc., Wisconsin; Mid W., Mid-West; TYPE AND NUMBER OF CYLINDERS—v., vertical; h., Horizontal; o., Opposed; POSITION OF ENGINE—c., Crosswise of Tractor; l., Lengthwise of Tractor;—Sp. With., Spoked Wheel; C., Caster; COOLING SYSTEM—w., pump; t-s., Thermo Siphon; MAKE OF CARBURETOR—Kings., Kingston; Schebl., Schebler; Buck., Buckeye; Stumbe., Stumbe; MAKE OF AIR CLEANER—Donald., Donaldson; TYPE OF IGNITION SYSTEM—Mag., Magneto; Bat., Battery; MAKE OF IGNITION SYSTEM—Berl., Berling; Spilt., Spildort; TYPE OF LUBRICATION—f., Force Feed; s., Splash; s., Force and Splash; FUEL USED—Alcohol., kerosene; d., Distillate; a., Alcohol; TYPE OF CLUTCH—c-bnd., Contracting Band; exp. sh., Expanding Shoe; fr. plate, Friction Plate; d-d., Dry Disc; d-p., Dry Plate; m-d., Multiple Disc; ext. co., External Contracting; TYPE OF TRANSMISSION—frict., Friction; Foote, Foot Stock; sel., Selective; Nil. enc., Nilson enclosed; spr. & bev., Spur and Bevel; MAKE OF BEARINGS—Hy., Hyatt; Tim., Timken; int.-up., Internal Expanding; TYPE AND MAKE OF TRANSMISSION—frict., Friction; Foote, Foot Stock; sel., Selective; Nil. enc., Nilson enclosed; spr. & bev., Spur and Bevel; MAKE OF BEARINGS—Hy., Hyatt; Tim., Timken; New Dep., New Departure; Fat., Faturn; FINAL DRIVE—b. & s., Bevel and Spur bev.; Bevel; int., Internal; w. Worm; SPRINGS—splt., Spiral; ellip., Elliptic; s-clip, Semi-elliptic; susp., Suspension; DRAWBAR TYPE—Horn., Horn; Guern., Guernsey; New Dep., New Departure; Adjustable; adj., Adjustable; vert. adj., Vertical Adjustment; Swing., Swinging; float, Floating.

TRADE NAME	Mode	Price	Type	Driven by	Wheelbase	Weight	No. of 14-inch Plows Pulled	Rated Draw-Bar H. P.	Plowing Speed	Make	ENGINE				Cooling System	Make of Carburetor	Make of Air Cleaner	Type of Ignition	Make of Ignition System	Spark Plug Size	Type of Lubrication	Fuel Used	Type of Clutch	Type and Make of Transmission	Make of Bearings in Transmission	No. of Forward Speeds	Road Speeds M. P. H.	Final Drive	Make of Rear Axle	Make of Bearings in Rear Axle	Make of Front Axle	Make of Bearings in Front	Type of Springs	Drawbar Type	Diameter	Face	Diam. Front Wheels	Diam. Rear Wheels	Length Over All	Width Over All	Diam. Turning Cir. in Ft.	Ground Clearance
											Normal R. P. M.	Type & No. of Cyl.	Bore and Stroke	Position of Engine																												
15-25	1185	4400	3	15	2250	Mid. W.	25	1100	V-4	4 1/2 x 5 1/2	Own	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	12 1/2	32	46	133	64	24	12		
20-35	1885	94	4	20	3000	Own	35	930	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	18	36	50	144	72	24	11		
25-40	2500	80	3	25	3000	Own	40	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
30-45	3350	80	3	30	3000	Own	45	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
35-50	4000	80	3	35	3000	Own	50	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
40-55	4800	80	3	40	3000	Own	55	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
45-60	5500	80	3	45	3000	Own	60	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
50-65	6300	80	3	50	3000	Own	65	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
55-70	7100	80	3	55	3000	Own	70	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
60-75	7900	80	3	60	3000	Own	75	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
65-80	8700	80	3	65	3000	Own	80	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
70-85	9500	80	3	70	3000	Own	85	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
80-95	11000	80	3	80	3000	Own	90	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
90-110	12500	80	3	90	3000	Own	100	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
100-125	14000	80	3	100	3000	Own	110	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
110-140	15500	80	3	110	3000	Own	120	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
120-150	17000	80	3	120	3000	Own	130	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
130-160	18500	80	3	130	3000	Own	140	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
140-180	20000	80	3	140	3000	Own	150	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
150-200	21500	80	3	150	3000	Own	160	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
160-225	23000	80	3	160	3000	Own	170	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
175-250	24500	80	3	175	3000	Own	180	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
190-300	26000	80	3	190	3000	Own	200	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
200-350	27500	80	3	200	3000	Own	210	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
225-400	29000	80	3	225	3000	Own	220	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
250-500	30500	80	3	250	3000	Own	230	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
275-600	32000	80	3	275	3000	Own	240	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
300-750	33500	80	3	300	3000	Own	250	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
325-900	35000	80	3	325	3000	Own	260	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
350-1100	36500	80	3	350	3000	Own	270	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
375-1300	38000	80	3	375	3000	Own	280	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
400-1500	39500	80	3	400	3000	Own	290	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
425-1750	41000	80	3	425	3000	Own	300	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
450-2000	42500	80	3	450	3000	Own	310	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
475-2250	44000	80	3	475	3000	Own	320	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
500-2500	45500	80	3	500	3000	Own	330	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
525-2750	47000	80	3	525	3000	Own	340	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
550-3000	48500	80	3	550	3000	Own	350	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
575-3250	50000	80	3	575	3000	Own	360	900	V-4	4 1/2 x 6 1/2	Hopper	p	Kings	Taco	Mag	Mag	Split	1/2	exp. sh.	Own	Hyatt	24-33	spur	Own	Hyatt	Own	24-33	spur	Own	Hyatt	Own	coil	swing	22	40	58	160	80	24	11		
600-3500	51500	80	3	600																																						



TRADE NAME



[illegible]



# The Most Prosperous Battery Dealers



That Vesta dealers are the most prosperous group of battery dealers in the country is generally admitted. There are several reasons for this: first, the Vesta Mutual Profit Plan that protects dealers and points the way to larger profits; secondly, the high quality of the battery; finally, the fact that the battery is well advertised

and sells readily. There are now 3,500 Vesta Service Stations—all making money. More are to be added. If you are interested in the Vesta Mutual Profit Plan, send a photograph of your Service Station, a brief history of yourself and your experience, and we will send you the plan in detail.

**VESTA BATTERY CORPORATION**  
2100 Indiana Avenue - Chicago

## BRANCH HOUSE SUBSIDIARIES:

**VESTA ELECTRIC & SUPPLY CO.**  
Atlanta, Ga.

**VESTA NEW ENGLAND BATTERY CO.,** Boston, Mass.

**VESTA BATTERY SALES CO.**  
Cleveland, Ohio

**VESTA KANSAS CITY BATTERY CO.,** Kansas City, Mo.

**VESTA PACIFIC BATTERY CO.**  
Los Angeles, Calif.

**VESTA STORAGE BATTERY CO.**  
New York City

**VESTA OMAHA BATTERY CO.**  
Omaha, Nebr.

**VESTA PITTSBURGH BATTERY CO.**  
Pittsburgh, Pa.

**VESTA BATTERY & EQUIPMENT CO.,** St. Louis, Mo.

**REINHARD BROS. CO., Inc.**  
Minneapolis, Minn.

**EQUIPMENT SERVICE CO.**  
Denver, Colo.

**J. P. SCHILLER CO.**  
San Francisco, Calif.

**AUTO EQUIPMENT CO.**  
Salt Lake City, Utah

# VESTA

## STORAGE BATTERY

Costs Less Per Month of Service



## Replacement Data Tables

Storage Batteries

Electric System

Lamp Bulbs

Headlight Lenses

## Revised Monthly

**HOW TO USE THIS TABLE.**—For Battery Replacements, look for the name of the car, find the serial number on that line under the name of the Battery desired, turn to the price list of storage batteries, look for the serial number, which will give you a description of the Battery with the price, F.O.B. Home Office.

**BASE CONTACT**—D. C. means Double Contact; S. C. means Single Contact.

Car	Year	Model	Electric System	STORAGE BATTERIES																LAMPS													
				Ray	U. S. L.	Rear-Cat	Cole	Utility	Columbia	Eveready	Erie	Gould	Hartford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Wittberbee	Cincinnati	Marko	Heiser	Base Contact	HEAD		SIDE		REAR		INSTRUMENT	
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.
Abbott-Detroit	15	Road	A-L	6296	1135	5886	6113	4169	554	222	896	3411	3004	3699	20	1631	381	4515	1518	5027	4763	5221	sc	6-8	15	...	...	...	...	...	...	...	...
	15	Tour	A-L	1268	5536	5901	6124	4124	549	191	898	3416	3038	3789	60	1639	429	4588	2134	1520	5056	4817	5857	sc	6-8	15	...	...	...	...	...	...	...
	16	8-90	A-L	6280	1110	5631	5873	6106	4123	522	217	888	3441	2987	3791	02	1627	430	4581	2179	1506	...	...	sc	6-8	24	171	...	...	...	...	...	...
	16-17	6-44	Remy	6215	1298	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	18	8-90	Remy	6215	1298	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	18	6-60, 65	Remy	6215	1298	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	19	6-64-65	Remy	6215	1298	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	20	Truck	Remy	6243	1299	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
Ace	20	All	West	6243	1299	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
Ace	21	All	West	6243	1299	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
Acme	18	1, 2, 3 1/2 Ton	West	6243	1299	5548	5805	6102	4002	607	217	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	19	B, A	West	6200	1301	5556	5801	6102	4001	609	215	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
	20	All	West	6201	1300	5556	5801	6102	4001	609	215	829	3423	3193	3564	26	1641	458	4546	2113	1504	4958	4795	5266	sc	6-8	20	129	...	...	...	...	...
Adams-Lancia	14-15-16	35A, B	Rush	6296	1135	5886	6113	4169	554	222	896	3411	3004	3699	20	1631	381	4515	1518	5027	4763	5221	sc	6-8	15	...	...	...	...	...	...	...	
	17	35A, B	Rush	6296	1135	5886	6113	4169	554	222	896	3411	3004	3699	20	1631	381	4515	1518	5027	4763	5221	sc	6-8	15	...	...	...	...	...	...	...	
	18	35 HP	Rush	6294	1137	5539	5888	6113	4167	553	222	896	3411	3004	3699	21	1639	385	4516	1518	5024	4863	5302	sc	6-8	15	...	...	...	...	...	...	
Alco	13	11	G-D	6224	1110	5631	5873	6106	4123	522	217	888	3441	2987	3791	02	1627	430	4581	2179	1506	...	...	sc	6-8	24	171	...	...	...	...	...	
Allen	15	38, 40	A-L	6244	1254	5616	5893	6124	4110	518	187	888	3444	2929	3774	62	1635	420	4581	2169	1508	5041	4812	5353	dc	6-8	17	166	...	...	...	...	...
	15-16	33, 34, 35, 37	West	6244	1110	5505	5873	6106	4157	522	217	886	3405	2987	3674	12	1627	362	4504	2113	1506	4973	4755	5210	sc	6-8	20	129	...	...	...	...	...
	17	36	Remy	6244	1110	5505	5873	6106	4157	522	217	886	3405	2987	3674	12	1627	362	4504	2113	1506	4973	4755	5210	sc	6-8	20	129	...	...	...	...	...
	18	41	A-L	6245	1316	5505	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	19	41	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007	614	218	886	3428	3204	3597	40	1643	362	4558	2031	1510	4973	4798	5210	sc	6-8	20	129	...	...	...	...	...
	20	43	A-L	6245	1316	5515	5847	6106	4007																								



# THE LAST WORD IN STORAGE BATTERY BOXES



The All Composition  
Battery Container

—The Remarkable—

## “AHLBELL”

One Piece

## BATTERY CONTAINER

### SATISFIED CUSTOMERS

Batteries built in *Ahlbell One Piece Containers* last longer and give better service. The elements are permanently protected against all external forces.

*Ahlbell Containers* stop all complaints and expensive adjustments on cracked, leaking jars and acid-eaten, warped or broken boxes.

### MORE PROFITS

The neat, rugged appearance of your batteries built up in *Ahlbell Containers* will increase your sales.

Saving time and labor in making your batteries will lower your costs. You will never have to spend your profit making good defective or easily broken jars and acid-eaten wood cases.

### MANUFACTURERS — JOBBERS — DEALERS

*Use Ahlbell Non-Breakable, Non-Conductive, Non-Deteriorating  
Freeze-Proof, Leak-Proof Containers*

The original and best one piece container on the market. Built in all standard sizes for Automotive and Radio batteries. The last word in storage battery containers and a profitable business builder for you.

Wire, write or use the attached coupon for complete details.

**AHLBELL BATTERY CONTAINER CORPORATION**

General Offices and Factory

700 MARKET ST.

WAUKEGAN

ILLINOIS

Ahlbell Battery  
Container Corp.

Waukegan, Illinois

Send me literature, prices  
and complete details of the  
Ahlbell One-Piece Container

I am a Manufacturer.. Jobber.... Dealer....

Name .....

Address .....

M.R.



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS												
				Ray	U. S. L.	Bear-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Witherbee	Cincinnati	Marco	Heseler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT				
																										Volts	C.P.	Volts	C.P.	Volts	C.P.	Volts	C.P.	Volts	C.P.	Volts
Barbour	18			6279	1304		5857	6104	4061												2021	1504														
Bartholomew	17-18-19			6244	1116		5855	6108	4054												2117	2082														
Beggs	18			6242			582.9	6102	4001												4547	2015	1510													
	20			6200	1311		5809	6102	4002												4547	2015	1504													
	21	20 T		6200	1311	5556	5809	6102	4002		215		3404			34									sc	6-8	12-16	18	129							
Bell	16	A-16	Diaco	6307		5506	5932	6132	4077	564	231	886	3405	3009	3712	12	1627	389	4504	2143	152	5068	4833		sc	12-16	16	175	12-16	3	67	12-16	3	67		
	17			6203					4002	511						34				2010	1304			5209	sc											
	17	A-17	G-D	6244	1110	5505	5873	6106	4157	564	217	886	3405	2987	3674	12	1627	362	4504	2113	1501	4973	4755		sc	6-8	17	165	6-8	5	81	6-8	5	81		
	18			6209	1302	5544	5806	6106	4002	512	215		3423	2987	3565	26	1641	458	4546	2012	1504	4955	4795	5209	sc	6-8	17	165	6-8	5	81	6-8	5	81		
	18	C					5873		4002	511										2012	1504					6-8	17	165	6-8	5	81	6-8	5	81		
Belmont	20	A										829													5275	6-8	17	165	6-8	5	81	6-8	5	81		
Ben Hur	17-18			6243	1190	5534	5841	6106	4053	617	219	831	3427	3187	3578	4	1643	479	4529	2098	1511	4971	4778		sc	6-8	17	165	6-8	5	81	6-8	5	81		
Benton	14											926	3483	3052											5275	6-8	17	165	6-8	5	81	6-8	5	81		
Bessemer	15-16	A, C, E, H		6244	1127	5524						892													5365	6-8	17	165	6-8	5	81	6-8	5	81		
Bethlehem	18-19	D2, E3, Ton, F	G-D	6245	1317		5841	6106	4006			831	3431							2028					sc	6-8	20	129	6-8	5	81	6-8	5	81		
	20			6242	1318			6106	4006	175										2027	1504				5275	6-8	20	129	6-8	5	81	6-8	5	81		
Biddle	16-17	C-D	G-D	6233	1182	5566		6108	4064	622	234	832	3431	3181	3609	27	1644	480	4566	2021	1511	4972		sc	6-8	20	129	6-8	5	81	6-8	5	81			
	17	D-17		6233	1304	5566	5857	6108	4061	622	234	830		3181	3511	2	1644		4553	2021	1507	4972		sc	6-8	20	129	6-8	5	81	6-8	5	81			
	17-18	H, H-17, D		6233	1182	5566	5857	6108	4061	613	224	830	3431	3181	3511	2	1642		4553	2021	1507	4972		sc	6-8	20	129	6-8	5	81	6-8	5	81			
	19	H-3			1324	5598	5857	6108	4013	613	226			3181		2	1628		2040	1505				5246	sc	6-8	20	129	6-8	5	81	6-8	5	81		
	20			6233	1211		5854	6108	4015	611	226	834		3250	3573	2		260		2042	1505	5002		sc	7	17	129	7	81	7	81	7	81			
	20	H-3		6242	1211	5596	5854	6108	4013	622	226				3523				4566	2042	1505			sc	6-8	20	129	6-8	5	81	6-8	5	81			
Birch	18	Super 4		6243		5584				525						40									sc	6-8	20	129	6-8	5	81	6-8	5	81		
	18	B-30, 40																							sc	6-8	20	129	6-8	5	81	6-8	5	81		
Bourne M	18	VM-2			1288		5958		4041	603		956	3431							2009					sc	6-8	17	165	Inst	bas	6-8	2	63	6-8	2	63
BourDay	16-17		G-D	6254	1113	5504	5873	6106	4157	522	217	979	3405	2987	3676	12	1627	370	4504	2124	1506	4973	4769	5350	sc	6-8	17	165	Inst	bas	6-8	2	63	6-8	2	63
	18	18A					5873	6106	4157											2124					5239	sc	6-8	17	165	6-8	5	81	6-8	5	81	
	18	18B						6106	4157											2028					sc	6-8	17	165	6-8	5	81	6-8	5	81		
	19	20						6106	4005											2028	1510	4973		sc	6-8	17	165	6-8	5	81	6-8	5	81			
	20			6243	1318	5530		6106	4005	608	218			3250	3514	34				2028	1510	5003		sc	6-8	17	165	6-8	5	81	6-8	5	81			
	21	21	West	6242	1317	5504		6106	4005																sc	6-8	17	165	6-8	5	81	6-8	5	81		
Bradley	20	Hearse		6242			5841	6106																	sc	6-8	17	165	6-8	5	81	6-8	5	81		
Bowl Gr.	15-16			6244	1127	5524																			sc	6-8	17	165	6-8	5	81	6-8	5	81		
Brewster	16-17-18-19		U.S.L.	6308	1345	5678	5928	6143	4088	636	240	984	3460	3234	3655	98	1663	505	4619	2076	1539	5091	4865		sc	12-16	30	141	6-8	5	81	6-8	5	81		
	21	O2																							sc	12-16	30	141	6-8	5	81	6-8	5	81		
Briscoe	14	14, B-15		6307	1142	5641	5932	6132	4077	566	231	908	3470	3009	3712	109	1653	389	4593	2143	1527	5068	4833		sc	6-8	17	165	6-8	5	81	6-8	5	81		
	15	15	Split	6307	1273	5641	5945	6150	4131	561	235	910		3043	3712	102	1667	437	4593	2186	1529	5102	4868	5223	sc	6-8	17	165	6-8	5	81	6-8	5	81		
	16	4-38, 8-38	Apel	6318	1143	5647	5935	6136	4080	569	20	908	3475	3012	3717	79	1653	387	4599	2120	1527	5071	4834	5359	sc	6-8	17	165	6-8	5	81	6-8	5	81		
	16	4-38, 8-38	Apel	6278	1149	5522	5878	6108	4082	531	225	887	3432	3251	3684	13	1644	466	4509	2122	1507	4987	4767	5225	sc	6-8	17	165	6-8	5	81	6-8	5	81		
	18-19-20	24, T-24, 4-24	A-L	6288	1109	5519	5879	6108	4063	530	224	887				13	1628	478	4509	2122	1507	4990	4767	5204	sc	6-8	20	129	6-8	5	81	6-8	5	81		
	21	4-34	A.L.																						sc	6-8	21	129								
Brockville	15-16			6313	1144	5644		6133	4078	566		908	3452	3155																						



# Charge for Service!

**D**OES it hurt a battery dealer's business to charge for service? Many Universal dealers tried it out for months. They say it *helped* their business—not a customer lost—income increased.

Keep track of the time you give away in free service. Figure what it costs you for thirty days. Also keep track of the free service "customers" who spend any money with you. Then you'll quit free service forever.

Universal standard charges recommended are: 15 cents for flushing and hydrometer reading; 25 cents for flushing, hydrometer reading and voltage test. No customer worth having will complain about that. The test by many Universal dealers has proved it.

We help Universal dealers charge for service by advertising it to the car-owning public. It means money from every car that stops in front of your door. Write for particulars on the Universal franchise—good territory available—and the experience of dealers who have tried it.

*Universal service is complete — batteries for every purpose—all parts for all makes of batteries—write for new catalogs.*

UNIVERSAL BATTERY CO.

3425 So. La Salle Street  
Chicago

BATTERIES FOR  
AUTOMOBILE  
FARM LIGHT  
ELECTRIC VEHICLE  
RADIO



(158)

# UNIVERSAL BATTERIES



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS													
				Ray	U. S. L.	Barr-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Presto-Lite	Titan	Universal	Vesta	Westinghouse	Willard	Witberbee	Cincinnati	Marko	Heisler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT					
																										Volts	C. P.	Mains No.	Volts	C. P.	Mains No.	Volts	C. P.	Mains No.	Volts	C. P.	Mains No.
Chandler	19	Ser 20	West	6243	1317	5584	5812	6102	4005	525	215	831	3203	3578	26	1641	297	4560	2028	1510	4971	4704	5278	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63	
	20	NS-21	G-D	6243	1317	5584	5812	6102	4005	525	218	831	3203	3578	26	1641	297	4560	2028	1510	4971	4704	5278	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63	
	21	Bsch.	Bsch.	6271	1317	5584	5812	6102	4005	525	218	831	3203	3578	26	1641	297	4560	2028	1510	4971	4704	5278	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63	
Charter O'K	17	A-B	West	6244	1316	5584	5812	6102	4007	525	218	831	3203	3578	26	1641	297	4560	2028	1510	4971	4704	5278	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63	
Chase	17-18	Q-172, 173	A-L	6244	1316	5584	5812	6102	4007	525	218	831	3203	3578	26	1641	297	4560	2028	1510	4971	4704	5278	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63	
Chevrolet	15	L	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	15	H2, 2 1/2, 4	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	15	Baby Gr...	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	15	H3	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	15	Monroe	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	16	Baby Gr.	A-L	6244	1110	5505	5901	6109	4164	549	217	886	3409	2996	3693	66	1639	373	4588	2113	1512	4973	4758	5210	sc	6-8	20	167	6-8	5	81	6-8	2	63	6-8	2	63
	16-17	Am'y, Roy-M	A-L	6205	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	17	4-90	A-L	6245	1189	5572	5847	6106	4007	614	218	886	3428	3172	3597	26	1643	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	17	Baby Gr	A-L	6205	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	18	4-90	A-L	6205	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	18	FABG	A-L	6243	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	18	D-8	A-L	6243	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	18	490	A-L	6203	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	19	F, B, G, T	A-L	6243	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	20	F, B, T	A-L	6200	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	20	490	A-L	6200	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	20	D4, D5	A-L	6200	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	20	B, G	A-L	6200	1175	5547	5806	6102	4001	606	217	829	3428	3196	3554	26	1641	457	4547	2086	1504	4955	4795	5266	sc	6-8	21	130	6-8	5	81	6-8	2	63	6-8	2	63
	20	C, G-6-4, 6-5	G-D	6244	1110	5505	5873	6102	4001	522	218	886	3402	2987	3674	1627	1629	429	4588	2113	1512	4973	4758	5210	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63
Chicago	17-18	C, G-6-4, 6-5	G-D	6244	1110	5505	5873	6102	4001	522	218	886	3402	2987	3674	1627	1629	429	4588	2113	1512	4973	4758	5210	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63
Classic	17			6244	1110	5505	5873	6102	4001	522	218	886	3402	2987	3674	1627	1629	429	4588	2113	1512	4973	4758	5210	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63
Cleveland	19-20			6230	1170	5562	5841	6102	4048	511	215	829	3428	3196	3554	34	293	4631	2089	1504	4952	4952	5334	sc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63	
	20	40	Bsch.	6230	1170	5562	5841	6102	4048	511	215	829	3428	3196	3554	34	293	4631	2089	1504	4952	4952	5334	sc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63	
	21	All	Bsch.	6200	1170	5562	5841	6102	4048	511	215	829	3428	3196	3554	34	293	4631	2089	1504	4952	4952	5334	sc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63	
Clydesdale	14-15	9-4, 9-6, Big 6	Delco	6300	1265	5636	5903	6125	4177	559	201	969	3449	3133	3812	75	1640	434	4591	2165	1521	4996	4828	5334	sc	6-8	24	169	6-8	7	83	3-4	2	61	3-4	2	61
Cole	15	10-4, Std 4, Little 6	Delco	6242	1321	5586	5846	6106	4011	614	221	963	3407	3205	3593	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	16	4-40, 6-66, 8-50	Delco	6242	1322	5579	5848	6106	4008	617	220	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	17	8-60, 61, 62	Delco	6242	1318	5585	5848	6106	4008	617	218	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	17	870	Delco	6274	1292	5582	5821	6106	4007	614	218	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	19	Aero 870	Delco	6274	1292	5582	5821	6106	4007	614	218	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	20	All	Delco	6274	1292	5582	5821	6106	4007	614	218	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
	21	870	Delco	6242	1322	5579	5848	6106	4008	617	220	965	3407	3206	3578	6	1643	473	4559	2033	1510	4979	4777	5319	sc	6-8	27	169	6-8	7	83	3-4	2	61	3-4	2	61
Collier	17	M	Dynet	6215	1298	5548	5833	6102	4002	609	217	829	3405	3193	3510	25	1641	456	4546	2012	1504	4958	4795	5266	sc	6-8	21	129	6-8	5	81	6-8	2	63	6-8	2	63
	18, 19, 20	M-15, 16, 17	A-L	6201	1300	5555	5829	6102	4000	609	216	829	3405	3193	3510	25	1641	456	4546	2012	1504	4958	4795	5266	sc	6-8	21	129	6-8	5	81	6-8					



# DURO PLATES

## FOR BATTERY BUILDERS



Now, more than ever before, Battery Stations are called upon to build up their own starter batteries.

To meet this demand the DURO line of plates has been developed, using a straight bar grid and exactly the same high-grade materials and workmanship used on the Titan plates.

Far-sighted battery men demanding a responsible and reliable source of supply will do well to get in touch with us.

Tonnage production enables us to quote attractive prices.

New York City  
Warehouse  
123 West 56th Street

**GENERAL**  
**LEAD BATTERIES COMPANY**  
CHAPEL STREET AND LISTER AVENUE  
**NEWARK, N.J.**

Chicago District  
Warehouse  
601 West 80th Street

Mid-West and  
Pacific Coast Distributors  
With complete stocks

**Western Electric Company**

Incorporated  
Seattle      Denver      Salt Lake  
Los Angeles      Omaha      Minneapolis  
San Francisco

Batteries for Starting Automobiles, Farm Lighting, Electric Vehicle  
Radio Sets, Boat Lighting, Alarms, etc.



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				Ray	U. S. L.	Barr-Cat.	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Witherbee	Chinchatti	Marko	Heisler	Base Contact	HEAD			SIDE			REAR			INSTRUMENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Davis.....	20	51 to 57	Delco	6200	1301	5545	5801	6106	606	218	831			3500	34	1631	312	4552	2010	1504	4955			sc	6-8	20	129																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS										
				Ray	U. S. L.	Bear-Cat.	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Presto-Life	Titan	Universal	Vesta	Westinghouse	Willard	Witherbee	Cincinnati	Marko	Heislter	Base Contact	HEAD		SIDE		REAR		INSTRUMENT		
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.
Ford....	15	N-E	N-E	6307	1277	5683	5959	6155	4154	600	196	912	3460	3045	3808	119	1659	441	2192	1584	5086	4886	5361	de	12-16	16	16	12-16	6	90	12-16	6	90	
	15-16	West	West	6307	1223	5661	5917	6132	4077	628	231	839	3470	3223	3629	89	1659	493	4612	2107	1531	5068	4849	5293	de	6-8	20	141	12-16	6	91	12-16	3	67
	15-16	Kemco	Kemco	6244	1127	5524	5881	6109	4164	538	220	892	3436	3090	3693	16	1771	373	4511	2128	1512	5003	4758	5215	de	6-8	20	130	6-8	5	82	6-8	5	82
	16	GD	D-U	6205	1252	5515	5890	6119	4108	510	229	878	3441	3028	3770	16	1686	418	4580	2014	1595	4962	4795	5368	de	6-8	20	130	6-8	5	82	6-8	5	82
	16	Dyneto	Dyneto	6310	1146	5543	5934	6132	4077	564	231	839	3470	3009	3711	79	1653	392	4593	2143	152	5066	4833	5293	sc	2	16	30	141	12-16	6	90		
	16	N-E	N-E	6310	1280	5686	5947	6172	4137	600	217	829	3470	3048	3808	119	1659	441	2192	1584	5086	4886	5361	de	12-16	16	16	12-16	6	90	12-16	6	90	
	16-17	Disco	Disco	6243	1142	5555	5829	6102	4000	609	216	829	3470	3009	3711	79	1653	392	4593	2143	152	5066	4833	5293	sc	2	16	30	141	12-16	6	90		
	17	Berns St	Berns St	6201	1300	5555	5829	6102	4000	609	216	829	3470	3009	3711	79	1653	392	4593	2143	152	5066	4833	5293	sc	2	16	30	141	12-16	6	90		
	17	A-B-C	A-B-C	6200	1171	5556	5829	6101	4000	606	214	827	3423	3002	3502	47	1639	441	4545	2210	1504	4953	4793	5266	sc	12-16	20	142	6-8	5	81	6-8	5	81
	17	GD	G-D	6205	1175	5547	5890	6102	4002	606	217	829	3423	3002	3502	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	18	T	T	6205	1175	5547	5890	6102	4002	606	217	829	3423	3002	3502	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	19		F A	6205	1175	5547	5890	6102	4002	606	217	829	3423	3002	3502	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	20			6205	1175	5547	5890	6102	4002	606	217	829	3423	3002	3502	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
Fostoria..	16	C	Al-C	6215	1170	5545	5833	6102	4002	606	215	829	3423	3191	3564	26	1641	438	4546	2012	1504	4958	4795	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17	4 Cyl		6215	1170	5545	5833	6102	4002	606	215	829	3423	3191	3564	26	1641	438	4546	2012	1504	4958	4795	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
Four-Wht.D Franklin..	16-17-18-19	B Stg. Ltg.	N-E	6307	1285	5695	5917	6164	4149	595	204	939	3485	3054	3684	118	1679	448	2198	1572	5118	4882	5347	de	6-8	20	142	6-8	5	82	6-8	5	82	
	14	2, 3, 4, 5	Dyneto	6307	1285	5695	5917	6164	4149	595	204	939	3485	3054	3684	118	1679	448	2198	1572	5118	4882	5347	de	6-8	20	142	6-8	5	82	6-8	5	82	
	14-15-16	6, 7, 8	Dyneto	6307	1285	5695	5917	6164	4149	595	204	939	3485	3054	3684	118	1679	448	2198	1572	5118	4882	5347	de	6-8	20	142	6-8	5	82	6-8	5	82	
	16-17-18-19-20	9, A-B8	Dyneto	6307	1222	5661	5917	6132	4030	628	234	839	3452	3223	3533	94	1659	497	4612	2062	1527	5068	4849	5293	de	12-16	20	142	12-16	6	90	12-16	6	90
Frontmobile	17		Al-C	6201	1300	5555	5829	6102	4000	609	210	829	3421	3190	3500	25	1641	467	4550	2011	1504	4953	4794	5266	sc	20	142							
Fulton Tr.	17	F-1		6243	1317	5584	5841	6106	4005	609	210	829	3421	3190	3500	25	1641	467	4550	2011	1504	4953	4794	5266	sc	20	142							
	18	1 Ton		6201	1300	5555	5829	6102	4000	609	210	829	3421	3190	3500	25	1641	467	4550	2011	1504	4953	4794	5266	sc	20	142							
	19	1 Ton		6201	1300	5555	5829	6102	4000	609	210	829	3421	3190	3500	25	1641	467	4550	2011	1504	4953	4794	5266	sc	20	142							
	21	A	West	6201	1300	5555	5829	6102	4000	609	210	829	3421	3190	3500	25	1641	467	4550	2011	1504	4953	4794	5266	sc	20	142							
G. M. C..	17		Delco	6243	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17		Delco	6243	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17		Vesta	6242	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	20			6242	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
	21	K15,16,41,71,101	Own	6242	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
Geneva....	20			6242	1172	5555	5841	6103	4006	609	216	829	3423	3002	3514	47	1639	441	4545	2210	1504	4953	4793	5266	sc	6-8	20	129	6-8	5	81	6-8	5	81
Gersix....	16-17	C, G	West	6254	1110	5505	5873	6106	4157	522	217	886	3423	2987	3674	12	1641	429	4504	2113	1506	4973	4755	5210	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17-18	4-38, 6-60		6201	1110	5505	5873	6106	4157	522	217	886	3423	2987	3674	12	1641	429	4504	2113	1506	4973	4755	5210	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17	Q		6254	1110	5505	5873	6106	4157	522	217	886	3423	2987	3674	12	1641	429	4504	2113	1506	4973	4755	5210	sc	6-8	20	129	6-8	5	81	6-8	5	81
Garford...	17	66B, 70, 75	A-L	6244	1127	5524	5841	6109	4164	538	220	832	3405	2996	3693	12	1629	451	4511	2136	1518	5003	4755	5210	sc	6-8	20	129	6-8	5	81	6-8	5	81
	17	70C		6244																														



Car	Year	Model	Electric System	STORAGE BATTERIES															LAMPS																				
				Ray	U. S. L.	Pear-Cat	Cole	Utility	Columb a	Eveready	Exide	Gould	Hartford	Philadelphia a Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Witberbee	Cincinnati	Marko	Heisler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT							
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.		
Haynes...	16	34, 35	LN	6244	1259	5624	5896	6109	4116	533	190	833	3444	3088	65	1637	487	4586	2175	1514	5050	4814	5355	de	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
	16-17	36, 38, 40, 41	LN	6244	1217	5600	5860	6109	4018	623	190	833	3436	3218	29	1645	487	4571	2175	1512	5003	4801	5285	d	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
	17-18	38, 39, 43, 44	LN	6244	1217	5600	5860	6109	4018	623	258	833	3436	3218	29	1645	487	4571	2051	1512	5003	4901	5275	de	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
	19	38, 39, 39r, 45, 46	LN	6244	1316	5651	5896	6109	4007	623	218	865	3436	3204	3613	40	1645	487	4571	2029	5003	4901	5317	de	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
	20	43, 44, 44r, 45	Leece	6244	1335	5682	5862	6109	4017	614	218	833	3436	3218	43	40	1645	470	4627	2049	4973	4901	5317	de	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
	21	47	Leece	6242	1316	5651	5896	6109	4017	614	218	833	3436	3218	43	40	1645	470	4627	2049	4973	4901	5317	de	6-8	20	130	6-8	4	82	6-8	4	82	6-8	4	82	6-8	4	82
H. C. S.	20	All	Dyn	6242	1318	5585	5896	6109	4017	614	218	839	3452	3218	3629	40	1645	4564	2027	2051	5003	4861	5294	de	6-8	17	166	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
Hercules.	15	K	Dyn	6307	1230	5663	5896	6132	4030	578	218	839	3452	3218	3629	40	1645	4612	2063	1531	5063	4861	5294	de	6-8	15	130	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
Herschoff.	15	4-16	APL	6313	1151	5651	5896	6139	4085	578	218	839	3452	3218	3629	40	1645	4598	2043	1506	5076	4842	5228	de	6-8	17	166	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
Herf Br.	15	4-40, 6-50	APL	6318	1143	5647	5896	6139	4080	578	218	839	3474	3012	3637	81	1655	4599	2143	1527	5071	4834	5225	de	6-8	20	130	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
	16	4-35	APL	6319	1226	5668	5896	6135	4080	578	218	839	3470	3227	3637	89	1659	4599	2067	1527	5065	4848	5297	de	6-8	20	130	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
	16	H-650	APL	6202	1307	5651	5896	6139	4002	578	218	839	3474	3225	3635	81	1655	4547	2013	1506	5076	4842	5228	de	6-8	17	166	6-8	5	82	6-8	5	82	6-8	5	82	6-8	5	82
Herring.	18	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	4	1643	4560	2026	1510	4971	4796	5275	de	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
Higraide.	17-18	B	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	28	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	18	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	4	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
Hollier.	16	166	ALC	6215	1170	5548	5833	6102	4080	631	207	839	3474	3225	3635	26	1641	458	2026	1504	4958	4795	5296	sc	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	16	168	APL	6318	1227	5704	5918	6136	4002	607	207	839	3474	3225	3635	26	1641	458	2026	1504	4958	4795	5296	sc	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	17	168	APL	6318	1227	5704	5918	6136	4002	607	207	839	3474	3225	3635	26	1641	458	2026	1504	4958	4795	5296	sc	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	17-18	168, 176, 178	APL	6318	1227	5704	5918	6136	4002	607	207	839	3474	3225	3635	26	1641	458	2026	1504	4958	4795	5296	sc	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	18-19	168, 206	APL	6318	1227	5704	5918	6136	4002	607	207	839	3474	3225	3635	26	1641	458	2026	1504	4958	4795	5296	sc	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	20	168, 206	APL	6245	1306	5704	5918	6136	4054	578	207	839	3474	3225	3635	89	1659	454	2062	1531	4952	4901	5301	ac	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
Holly.	17	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	4	1643	4560	2026	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
Holmes.	18	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	28	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	19	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	4	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	20	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	28	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
	21	A	APL	6243	1317	5651	5896	6139	4005	578	218	831	3427	3203	3514	4	1643	4560	2028	1510	4971	4796	5275	de	6-8	20	130	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81
Hoover.	17	15A	Dyn	6304	1110	5505	5873	6106	4157	578	217	886	3428	3204	3679	12	1627	4504	2113	1506	4973	4755	5210	de	12-16	144	12-16	4	90	12-16	144	12-16	4	90	12-16	144	12-16	4	90
Houghton.	16	400	Dyn	6244	1110	5505	5873	6106	4157	578	217	886	3404	2987	3674	12	1627	4504	2113	1506	4973	4755	5210	de	12-16	144	12-16	4	90	12-16	144	12-16	4	90	12-16	144	12-16	4	90
	17	400	Dyn	6243	1190	5584	5841	6106	4053	578	217	886	3404	2987	3674	12	1627	4504	2113	1506	4973	4755	5210	de	12-16	144	12-16	4	90	12-16	144	12-16	4	90	12-16	144	12-16	4	90
Howe.	19	6-40	Delco	6303	1223	5591	5919	6031	4031	578	217	886	3428	3204	3679	12	1627	4504	2113	1506	4973	4755	5210	de	6-8	20	129	6-8	5	81	6-8	5	81	6-8	5	81	6-td		



[illegible]



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS															
																								HEAD				SIDE		REAR		INSTRUMENT							
				Ray	U. S. L.	Bear-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Witcher	Cincinnati	Mariko	Heisler	Base Contact	Vols	C. P.	Mazda No.	Vols	C. P.	Mazda No.	Vols	C. P.	Mazda No.	Vols	C. P.	Mazda No.		
McLaughlin	17-18		Delco	6200	1171	5556	5829	6102	4001	608	215	967	3404	3190	25	1641	467	4552	2010	1504	4953	4772	5315																
Macar	18	M		6242	1318	5556	5841	6106	4006	5.4	215				16	1629		4564	2027																				
Mack	16	AB, AC		6244	1127	5524	5881	6109			220	892	3436	2996				4511	2128	1512	5003	4758	5215																
	17-18	AB, AC		6311	1152	5649	5938	6139	4082			912	3468	3014	3724		82	4596	2216	1533	5082		5228																
	19			6304	1155	5653	5938	6138	4082			912	3468	3014	3720		80	4597	2147	1533	5087		5227																
	20						5841	6132			167							4636	2203																				
Madison	15-16-17	T, T-7	Remy	6291	1205	5594	5858	6108	4015	621	225	832	3432	3186	3607	27	1644	483	4568	2041	1511	4989	4787	5252	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
	18		Remy	6291	1205	5594	5858	6108	4015	621	226	827		3186	3607	27	1644	483	4568	2040	1511	4989	4787	5252	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
	19-20	6-cyl.	Remy	6303	1324		5857	6108	4013			827						4568	2010	1510					6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
Maibohm	17	A	Disco				5912	6152	4077	629	232	908	3470	3008	3628	99		492	4611	2212	1527		4858	5224	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
	18	B	Disco				5912	6152		514	232	908		3008	3546	47					1527				6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
	19	B	Disco				5912	6152		514	232	908		3008		99					1527				6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
	20	A	Disco	6201	1300	5555	5912	6102	4046	514	232	908		3242	3546	47	1689	4542	2208	1527	4953	4792	5265	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63	
	21		Wag	6201	1300	5555	5829	6102	4000	609	214	827		3242				4543	2011	1504	4953	4792	5265	12-16	21	141													
	22		Wag	6200	1301	5555	5829	6102		609	215		3427		3500	34		296	4552	2010	1504	4953		5265	6-8	17	129												
Majestic	17		W-L	6200														1627	362	4504	2113	1506	4973	4755	5210	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63		
Marathon	14		Jesco	6258	1165	5690	5882	6109	4097	591	245	924	3431	3021	3742	112	1665	405	1510	1557	5108	4879	5234	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63	
	15		Jesco	6244	1165	5690		6161	4097	591	245	924	3431	3021	3742	112	1665	405	1510	1557	5108	4879	5234	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63	
	16		Jesco	6244	1128	5602		6161	4166	540	219	827		2987	3691	15	1629	374	4504	2113	1512	5009	4755	5210	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63	6-8	2	63
Marion	14-15	48A, B, C, 4	West	6244	1110	5505	5873	6106	4157	522	220	886	3428	2987	3674			12	1629	362	4504	2113	1506	4973	4755	5210	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64	
	16	K	West	6244	1316	5572	5847	6106		552	217	881		2987	3586			12	1627	362	4504	2113	1506	4973	4755	5210	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64	
Mar-	17	B	West	6244	1317	5572	5841	6106	4007	552	220	886	3428	2987	3586			12	1627	362	4504	2113	1506	4973	4755	5210	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64	
Handley	19	B	West	6244	1317	5572	5841	6106	4007	552	220	886	3428	2987	3586			12	1627	362	4504	2113	1506	4973	4755	5210	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64	
Marmon	14	41, 48	N-E	6244	1317	5572	5841	6106	4007	552	220	886	3428	2987	3586			12	1627	362	4504	2113	1506	4973	4755	5210	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64	
	15	41, 48	Jesco	6311	1152	5649	5938	6139	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
	16	34, 41	Bosch	6305	1153	5648	5939	6138	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
	17	34	Bosch	6305	1153	5648	5939	6138	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
	18		Bosch	6305	1153	5648	5939	6138	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
	19		Bosch	6305	1153	5648	5939	6138	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
	20		Bosch	6305	1153	5648	5939	6138	4083	576	235	924	3431	3021				112	1665	405	1510	1557	5108	4879	5215	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64		
Marshall	20		Delco	6242	1341	5599		6111	4024	609	222	833	3436	3221	3500			46	4637	2056					6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
Martin	20			6242			5829											46	4637	2056					6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
Wasp	21	211	West	6242			5862											46	4637	2056					6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
Martin	14		N-E	6296					4168	623				3003	3702			1631	381	4515		5027			6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
Mason	14	B	N-E	6296					4168	623				3003	3702			1631	381	4515		5027			6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
	15		Jesco	6296					4168																														



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS													
																								HEAD		SIDE		REAR		INSTRUMENT							
				Ray	U. S. L.	Bar-Cast.	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Prest-Lite	Titan	Universal	Vesta	Westinghouse	Willard	Wittberbe	Cincinnati	Marlo	Haisler	Base Contact	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.
Moline...	19	MK	Wag	6243	1317	5884	5881	6106	4005	617	...	331	3421	3203	3514	...	1648	3/3	4560	2028	1510	4971	4797	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Moline Kr.	20	J. R.	Wag	6242	...	5881	5881	6106	4005	617	...	331	3421	3203	3514	...	1642	4360	2027	1510	4971	4797	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Monitor...	18	D	...	6240	...	5881	...	6102	...	628	...	331	3432	3182	3513	...	1642	4556	2025	1504	5039	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8
	17	4-30	...	...	...	...	...	6102	...	628	...	331	3432	3182	3513	...	1641	479	...	1504	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18	C. M. O. R.	Dyne	6201	1300	5855	5829	6102	4077	609	215	...	3423	3098	3629	...	1641	492	4610	2011	4953	4793	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	19	R-Road	...	6249	1310	5884	5851	4054	...	522	...	331	3436	3098	3594	...	26	304	4530	...	4971	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	20	B-50, 51, 52	Dyne	6242	...	...	...	...	...	...	...	...	...	...	3610	...	...	...	...	...	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Monroe...	15	A-L	A-L	6244	1110	5824	5881	6106	4124	538	...	892	3409	3789	...	12	373	4511	2113	1512	5003	4758	5215	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	15	M-2 1/2	A-L	6244	1110	5824	5881	6106	4124	538	220	892	3409	3789	...	12	373	4511	2113	1512	5003	4758	5215	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	16	M	A-L	6244	1127	5824	...	6106	...	522	217	886	3423	2987	...	16	1627	362	...	1506	5003	4755	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	16-17	M-2, 3	A-L	6209	1108	5800	5838	6102	4002	512	217	882	3423	3061	3668	...	126	1625	361	4502	2128	1500	4955	4750	5209	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	16	M-4, 5	A-L	6209	1108	5800	5838	6102	4002	512	217	882	3423	3061	3668	...	126	1625	361	4502	2128	1500	4955	4750	5209	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	17	M-4, 5	A-L	6205	...	...	...	6102	4002	512	217	882	3423	3066	3554	...	126	1625	361	4502	2128	1500	4955	4750	5209	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18-19	S, S, 7T, 8R	A-L	...	...	...	...	6102	4002	511	215	829	3423	3066	3554	...	126	1625	361	4502	2128	1500	4955	4750	5209	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	20	S-9, S-10	...	...	...	...	...	6102	4002	512	215	829	3423	3066	3554	...	26	454	4541	2014	1504	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Moon...	15	4-38, 6-40	Delco	6242	1112	5808	5875	6106	4177	526	221	963	3407	3074	3592	...	131	1627	473	4521	2116	1506	4979	4753	5319	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	15	6-50	Delco	6300	1245	5836	...	6125	4177	558	201	969	3449	3133	3812	...	79	434	4591	2165	1521	1508	4828	5334	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	16	6-30, 40	Delco	6220	1191	5879	5830	6102	4002	607	220	965	3428	3075	3566	...	26	1641	507	4540	2018	1504	4974	4774	4320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	17	6-43	Delco	6252	1189	5879	5852	6109	4007	615	220	965	3428	3204	3601	...	132	1643	479	4563	2047	1510	4974	4798	5320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	17	6-66	Delco	6244	1207	5879	5852	6109	4007	615	220	965	3428	3204	3601	...	132	1643	479	4563	2047	1510	4974	4798	5320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18	6-66	Delco	6207	1302	5844	...	6106	4048	511	215	967	3427	3243	3551	...	48	1689	454	4563	2047	1510	4974	4798	5320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18	6-66	Delco	6244	1190	5872	5847	6109	4005	614	218	965	3427	3210	3586	...	132	1643	479	4563	2047	1510	4974	4798	5320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18	6-66	Delco	6244	1189	5879	5847	6109	4005	614	218	965	3427	3210	3586	...	132	1643	479	4563	2047	1510	4974	4798	5320	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	19	6-66	Delco	6244	1316	5879	5812	6106	4008	616	218	965	...	3072	...	...	6	467	4558	2029	1510	4974	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	19	6-66	Delco	6244	1316	5879	5812	6106	4008	616	218	965	...	3072	...	...	6	467	4558	2029	1510	4974	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	21	6-48-68	Delco	6242	...	...	...	6106	4008	616	218	965	...	3072	...	...	6	467	4558	2029	1510	4974	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Moreland...	18-16	...	Split	...	1249	5813	...	6118	4106	...	180	...	3440	3134	3773	...	58	...	4579	1502	5038	4811	5351	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Moore...	18-17	30	...	6207	1106	5800	...	4048	511	...	609	...	3190	...	3667	...	34	...	1504	...	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	19-20	30C, F	...	6201	...	5800	5829	...	609	...	609	...	3190	...	3667	...	34	...	1504	...	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Moyer...	15	...	US	6244	1218	...	...	6113	...	538	...	3411	3143	3693	...	...	...	1511	2136	1512	5025	4758	5215	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	15	...	US	...	1127	...	...	6164	...	538	220	892	3411	2996	3702	...	16	373	4511	2138	1518	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	15	...	US	6295	1138	...	...	6168	552	223	896	...	3003	...	...	...	382	...	2128	1512	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Muskegon...	19	20	...	...	...	...	...	...	...	...	174	...	3444	3033	3782	...	65	1637	424	1589	2171	1514	5050	4814	5355	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
Murray...	18-17	Murray 8	West	6243	1338	5804	5885	6132	1023	624	222	835	...	3221	3538	...	46	1678	301	4576	2057	1603	5001	4802	5291	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	18	1918	West	...	1135	5836	...	...	...	...	...	...	3411	...	...	...	...	...	...	...	...	...	...	...	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	...	6-8	
	14	...	West	6258	1135	5836	...	...																													



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS														
				STORAGE BATTERIES																LAMPS																		
				Ray	U. S. L.	Bar-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Witcher	Cincinnati	Mariko	Heiser	Base Contact	Head	Side	Rear	Instrument									
																							Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.				
Oldsmobile	19	37-60			1175	5829	6106	4006	609					3500		1641	467	1504	4957																			
	20	45 B	Delco	6200	1318	5560	5829	6106	609					3500		1641	467	1504	4957																			
	20	37A	Delco	6200	1301	5560	5829	6102	609	215	829			3500		1643	467	1504	4957																			
	20	34 C				5829												1510																				
Olympian	17	45	A-L	6,200	1307	5560	5801	6102	606	215	829		3423	3554			4650	2063					5266															
	18-19	45	Conn	6200	1301	5560	5801	6102	606	215	829		3190	3505			296	4552	2010	1504	1504																	
Oneida Tr.	19	A, B, C, D			1350		5865		4187								4644	2202																				
	20			6201	1350		5865		4184								4636	2202	1518																			
	21	All	West	6242														2202																				
Oshkosh	20						6130	4182									4636	2202	1518																			
Overland	15	80, 81, 82	A-L	6288	1109	5519	5854	6108	4063	530	227	832	3432	2993	3686	27	1641	478	4534	2102	1511	4990	4787	5251	dc	6-8	17	165	6-8	5	81	3-4	2	61	3-4	2	61	
	16	75, B	A-L	6205	1175	5547	5838	6102	4002	606	217	829	3423	3196	3554	26	1641	464	4547	2014	1504	4955	4795	5266	dc	6-8	20	130	3-4	2	61	3-4	2	61	3-4	2	61	
	16-17	85, 86, 83, BOE	A-L	6288	1109	5519	5854	6108	4063	530	227	832	3432	3083	3686		1641	478	4534	2102	1511			4787	5251	dc	6-8	20	130	3-4	2	61	3-4	2	61	3-4	2	61
	19	85-4-0	A-L	6283				6102	4066	530	215	832		3196		1641	464	4534						5251	dc	6-8	20	130	3-4	2	61	3-4	2	61	3-4	2	61	
	20	4	A-L	6205	1175	5547		6102	4002	616	215	829		3196	3554	26	1641	464	4534		2014	1511			5251	dc	6-8	20	129	6-8	2	64	6-8	2	84	6-8	2	84
	20			6245				6102	4054	522			3423		3590	34		4547																				
	17	90	A-L	6205	1175	5547	5810	6102	4002	606	217	829	3123	3085	3554	26		464	4547	2014	1504	4955	4795	5266	dc	6-8	20	130	3-4	2	61	3-4	2	61	3-4	2	61	
	18	1200	A-L				5854	6102					3423	3196			464	4547																				
	18	90 PLD	A-L				5854	6102				829	3423	3091		20					1504	4955	4795															
	18	85-8B	A-L	6288	1109	5519	5854		4063	530			3423	3085	3686		368	4534																				
	18	85-4, 88-6, 89-6	A-L	6288	1109	5519	5854		4063	530			3423	3085	3686		368	4534																				
	19	90	A-L	6205	1175		5810	6102	4002	606		829	3423	3554		26	1641		4547	2014	1504	4955	4795	5266	dc	6-8	20	129	3-4	2	61	3-4	2	61	3-4	2	61	
	19	83-BOE	A-L	6205	1175		5810	6102	4002	606		829	3423	3554		26	1641		4547	2014	1504	4955	4795	5266	dc	6-8	20	129	3-4	2	61	3-4	2	61	3-4	2	61	
Owen-Magneto	16-17	G-A					6171		602	247			3246																									
	16-17	G-B					6170		602	255		956	3488	3059																								
	18	O-36					6170	4041	602			956	3059	3539																								
	18	M-25							602				3246			122	1675	287																				
	18	N-42							602									289																				
	19	W-42	Own					4045				817	3231	3545		122		289																				
	20													3545																								
	21					5703	5958		4045								271																					
Packard	14	138, 348	Bijur	6277	1294	5910	6129	4127	554	253	974	1414	3110	3761	73	269	4542	2130	1526					5367	dc	6-8	27	177										
	14-15-18-19-20	238, 338, 448, 548, 212, 6-36, 6-48, 3-25, 3-35		6299	1141	5538	5837	6114	4170	554	206	973	3448	3005	3704	134	1631	269	4542	2138	1606	5029	4764	5244	dc	6-8	27	177										
Packard Tr	18	Tr Stg No. East S, 9	N-E	6294	1350	5539			4187	554			3249	3820					4577				5024															
	18-19			6294						554			3025						4645	2206																		
	20			6294		5539		6114				973				134			4645	2139																		
Paige	14	25	G-D	6226	1275	5522	5905	6152	4132	562	195	900	3402	3130	3639	101	1647	410	4548	21-81	1522	5099	4870	5360	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63	
	14	36	G-D	6244	1316	5572	5905	6128	4004	614	217	890	3424	3104	3755	1643	410	4548	20-81	1510	5041	4798	5275	dc	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	64		
	14-15	25	G-D	6226	1289	5622	5905	6128	4004	518	205	900	3402	3104	3755	69	1647	410	4548	20-81	1522	5045	4823	5322	dc	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	64	
	17	8-38, 46	G-D	6244	1110	5505	5873	6106	4157	522	217	884	3428	2987	3674	12	1627	362	4504	21-13	1506	4973	4755	5210	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	64	
	17-18-19-20	K-6-17, 651, 46, 40, 55	G-D	6251	1209	5590	5815	6106	4007	614	220	831	3428	3213	3587	6	1643	362	4558	21-13	1510	4985	4779	5281	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	64	
			G-D	6251	1209	5590	5815	6106	4007	614	220	831	3428	3213	3587	6	1643	486	4558	2035	1510	4985	4779	5281	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	64	
Pal. Sing.	21	6-42, 66	Remy																2035																			
Pan Amer.	14		G-D	6244	1127	5524			4117	534		886	3434	2996	3780																							
	17-18	C-Ser-1, G-5	West	6244	1110	5505	5873	6106	4157			886	3427	2987	3674		1627	362	4504	21-13	1506	4973	4755	5210	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63	
	19-20	Amer			1318	5505	5841		4006			831		2987	3586			362	4564	2027		4973		5275	dc	6-8	20	133	6-8	5	81	6-8	2	63	6-8	2	63	
Pan.	21	6-55-L	West																																			
	19		Remy									829																										
	20	P-25					6106																															
Panhard	19	A, B		6200	1300		5829		4001										4550	2011	1510			5279	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	6	
	17-18				1317																																	
Parker	20			6294	1350																																	
	21	F, J, M-20	West	6242																																		
	19			6294	1350				4189																													



Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS													
				Ray	U. S. L.	Bent-Cat.	Cole	Utility	Columbia	Eveready	Exide	Gould	Harford	Philadelphia Grid	Prestolite	Titan	Universal	Vesta	Westinghouse	Willard	Wetherbee	Cincinnati	Marco	Haisler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT					
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.
Pierce Arrow	16	38C-4, 48B-4	West	1332	5846	6106	409	544	219	977	3416	3092	131	1643	491	4559	2036	1603	4979	4777	5319	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81			
	17	38C-4, 48B-4	West	6276	1342	5868	6112	4028	544	217	977	3416	3092	57	1643	491	4541	2060	1603	5020	4791	5321	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81		
	18	38C-5, 48B-5	West	6276	1342	5868	6112	4028	544	202	816	3092	57	1641	491	4541	2060	1603	5020	4791	5321	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81			
	19	38C-4, B-5	West	6276	1342	5868	6112	4028	544	202	816	3092	57	1641	491	4541	2060	1603	5020	4791	5321	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81			
	20	5 Ton	West	6276	1342	5868	6112	4028	544	202	816	3092	57	1641	491	4541	2060	1603	5020	4791	5321	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81			
	21	All	Delco	6242	1339	5611	5868	6112	4028	544	202	3416	491	4541	2060	1603	5020	4791	5321	sc	6-8	24	169	6-8	5	81	6-8	5	81	6-8	5	81	6-8	5	81		
Pilot	15	75	Delco	6244	1316	5505	5847	6106	4007	522	890	3428	3204	3586	6	1640	362	4558	2039	1510	4973	4798	5275	dc	6-8	21	129	6-8	5	82	6-8	2	64	6-8	2	64	
	15	55	West	6258	1228	5520	5882	6109	4166	540	215	890	3406	3196	3565	15	1645	374	4510	2127	1512	5009	4759	5215	dc	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64
	16-17	6-45	Delco	6209	1302	5544	5806	6102	4002	607	215	829	3406	3196	3565	26	1641	458	4546	2012	1504	4955	4795	5266	dc	6-8	21	130	6-8	5	82	6-8	2	64	6-8	2	64
	18	6-45	Delco	6203	1307	5543	5806	6102	4002	606	215	829	3406	3191	3558	26	1641	454	4547	2013	1504	4955	4795	5266	dc	6-8	20	164	6-8	5	82	6-8	2	64	6-8	2	64
	19-20		Delco	6208	1307	5545	5806	6102	4002	606	215	829	3423	3571	26	1641	454	4547	2013	1504	4955	4795	5266	dc	6-8	20	134	6-8	5	82	6-8	2	64	6-8	2	64	
Pontiac	16		Disco	6311	1289	5555	5847	6108	4007	522	890	3428	3204	3586	6	1640	362	4558	2039	1510	4973	4798	5275	dc	6-8	21	129	6-8	5	82	6-8	2	64	6-8	2	64	
Pratt	14	50	G-D	6258	1289	5520	5882	6109	4166	540	215	890	3402	3215	3580	5	363	4565	2030	1510	4982	4799	5275	dc	6-8	24	169	6-8	5	82	6-8	2	64	6-8	2	64	
	15	50	G-D	6258	1325	5520	5882	6109	4166	540	215	890	3402	3215	3580	5	363	4565	2030	1510	4982	4799	5275	dc	6-8	24	169	6-8	5	82	6-8	2	64	6-8	2	64	
Premier	16	6-50	Remy	1267	5630	5902	6126	4123	192	898	3447	3037	3791	67	1639	430	2180	1520	5056	4816	5357	dc	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
	16	6-50	Remy	1267	5630	5902	6126	4123	192	898	3447	3037	3791	67	1639	430	2180	1520	5056	4816	5357	dc	6-8	17	166	6-8	5	82	6-8	2	64	6-8	2	64			
	17	6-50	Delco	6280	1208	5593	5855	6108	4015	621	225	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
	18	6-50	Delco	6279	1197	5595	5855	6108	4013	622	228	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
	19	6-50	Delco	6279	1197	5595	5855	6108	4013	622	228	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
	20	6-50	Delco	6279	1197	5595	5855	6108	4013	622	228	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
	21	6-50	Delco	6279	1197	5595	5855	6108	4013	622	228	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
Pullmore	17-18	D	Disco	6243	1317	5584	5816	6106	4005	567	235	832	3432	3185	3524	7	1644	474	4568	2039	1511	4972	4807	5255	dc	6-8	20	129	6-8	5	81	6-8	2	64	6-8	2	64
Princess	16	D	Disco	6314	1147	5642	5938	6139	4083	576	237	831	3465	3004	3724	1655	396	4614	2216	5082	4841	5228	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63		
Pulman	17	F	Disco	6254	1113	5504	5873	6106	4157	522	217	979	3428	3297	3678	12	1627	370	4509	2124	1506	4973	4769	5239	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63
	17	Pull-Jr	Apel	1279	5655	5948	6156	4139	575	197	914	3046	3644	105	1669	442	2143	1535	5103	4873	5362	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63			
	16	Pull-Jr	Apel	1279	5655	5948	6156	4139	575	197	914	3046	3644	105	1669	442	2143	1535	5103	4873	5362	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63			
	17	424 Ser 1917	Split	6205	1111	5507	5838	6102	4002	606	217	829	3423	3069	3554	26	1641	464	4547	2014	1504	4955	4795	5266	dc	6-8	17	165	6-8	5	81	6-8	2	63	6-8	2	63
R. C. H.	15	D	Rush	6258	1189	5572	5847	6106	4007	522	890	3428	3204	3586	6	1640	362	4558	2039	1510	4973	4798	5275	dc	6-8	21	129	6-8	5	82	6-8	2	64	6-8	2	64	
Regal	15	L-4	Dynet	6312	1147	5642	5933	6133	4077	564	232	831	3465	3004	3713	1655	396	4614	2216	5082	4841	5228	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63		
	16	Regal 8	Dynet	6312	1147	5642	5933	6133	4077	564	232	831	3465	3004	3713	1655	396	4614	2216	5082	4841	5228	dc	6-8	17	125	6-8	5	81	6-8	2	63	6-8	2	63		
	17-18	J, 432	H-sp	6203	1170	5548	5833	6102	4048	606	217	829	3423	3069	3556	26	1641	462	4523	2048	1504	4955	4795	5266	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63
R & V	20	R	Rush	6242	1318	5513	5841	6106	4006	617	218	829	3423	3069	3554	26	1641	462	4523	2048	1504	4955	4795	5266	dc	6-8	20	129	6-8	5	81	6-8	2	63	6-8	2	63
Renault	17	Bosch	Bosch	6311	1147	5642	5938	6139</																													



## STORAGE BATTERIES

## LAMPS

Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS											
				Ray	U. S. L.	Bear-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Presto-Lite	Titan	Universal	Vesta	Westinghouse	Willard	Witherbee	Cincinnati	Marko	Hessler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT			
																										Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts	C. P.	Mazda No.	Volts
Sayers & Scoville	15-16	H & A	Delco	1267	5630	5901	6126	4123	549	215	898	3446	3190	3791	67	1641	430	4589	2180	1520	5056	4816	5357												
	17	H & A Tr	Delco	6244	1110	5505	5873	6106			880	3428	3037	3674	12	1639	362	4504	2113	1516	4973	4755	5210												
	18	HA		6201	1300	5555	5801	6102	4000	609	829		2987	3500	25	1627	429	4550	2011	1504	4953	4795													
	19	B		6200		5584		6102					3190			1641		4550		1504				sc	6-8	20	129								
Sayers Six Scripps-Booth	20			6200	1301	5584	5838	6102	4001	609		886	3421		3500	34	464	4552	2010	1504	4971					6-8	2	63	6-8	2	63				
	21	D P	Delco	6201															2011							6-8	21	129							
	15	O	Bijur	6313	1144	5644	5933	6133	4078	565		908	3469	3009	3706	78		454	4594		1527	5062	4836	5224	sc										
	16	C-4	West	6215	1170	5545	5833	6102	4002	512	230	829	3423	3193	3564	26	1653	458	4546	2141	4450	4958	4795	5266	sc	2-162	11	411	2-16	6	89	2-16	3	67	
	16-17	C-4, D-8	West	6215	1170	5545	5833	6102	4002	512	217	829	3423	3193	3564	26	1641	458	4546	2012	1501	4955	4795	5266	sc	12-16	21	141	12-16	6	89	12-16	3	67	
	18	D						6102		511	217	829		3066		26	1641		4546	2012	1504		4795	5270	sc	6-8	20	129	6-8	5	81	6-8	2	63	
	19	G		6203	1307	5572	5838	6102	4002	511	215	818		3169			1641	465	4546		1504				sc	6-8	20	129	6-8	5	81	6-8	2	63	
	20	BA, 40	Remy	6245	1306	5588	5806	6102		614	215	820					444	4564	2013	1504					sc	6-8	21	129							
Seagrave	21	B-39	Remy	6245											3597																				
	15	F	Remy	6254	1293			6130	4018		902		3108	3764	72		414	4573		1510	5019	4825	5327			6-8	20	129							
	16	F	West	6254	1293			6130	4018		902	3467	3108	3735	72	1651	403	4573	2005		5019	4825	5327			6-8	20	129							
	15-16	T	West	6254	1293			6130	4018	545	902		3108	3765	72	1651	414	4573	2005		5019	4825	5327			6-8	20	129							
	17	F, T, S	West		1161			6147	4088	585			3162	3735			294	4609		1545	5096	4825				6-8	20	129							
	18	F, T, S	West		1161			4088	585					3735						1545	5096	4825	5230				6-8	20	129						
	19-20	All			1346				585		829			3162	3735																				
Seldon	14-15	48, 49	G-D		1290															2012		4959			dc										
	20			6242	1335			6109	4017											2049															
Seneca	17	A		6215	1298	5548	5833	6102	4002	512	215			3564				4546	2012		4958	4795	5266			6-8	20	129							
	18	A	Al-C	6201	1300	5555	5831	6102	4002	609	215	829	3404	3105	3500	26	1641	293	4550	2011	1504	4953	4793	5268	sc	6-8	20	129							
	19	H	Al-C											3190		26			2078	1504					sc	6-8	20	129							
	20			6212	1300		5833	6102	4002	511			3405		3557	26			2011	1504		4953	5001												
Service	17	220, 230, 240		6273	1301	5556		6106	4159		217		3405	3117	3681		1627		4506																
	18	275, 300		6273	1213	5605		6109	4159		223		3413	3117	3681				4506																
	19	76, 101	West	6294	1350			6130					3249	3819					4645	2202															
	20	76, 101	West	6294				6130					3249	3819					4552	2205	1518														
Shadwick	17			6243	1317	5584	5841	6106	4005	617			3408		3514		1643		4560	2028	1518														
Signal	18	F																																	
	19	H																																	
	20	J																																	
	21	R																																	
Simplex	14			6294																															
	15	A-2, B-2, D	Rush	6296	1135	5536	5896	6113	4182	555	222	896	3411	3004	3699	20	1631	381	4515	2135	1518		5027	4763		dc	6-8	27	172	6-8	5	82	3-4	2	62
	16	S'plex E	Rush	6296	1268	5631	5901	6126	4124	555	222	896	3446	3004	3789	20	1639	381	4588	2179	1520		5057	4817		dc	6-8	27	172	6-8	7	84	3-4	2	62
	17	Crane S-5	Rush	6296	1135	5536	5896	6113	4182	555	222	896	3446	3004	3699	20	1631	381	4515	2135	1518		5027	4763	5290	sc	12-16	30	141	12-16	6	89	6-8	2	64
	18	5	Rush	6296	1232	5670	5896	6113	4082	555	239		3446	3174	3699	89	1631	381	4515	2108	1533		5087	4850	5302	sc	12-16	30	141	12-16	6	89	6-8	2	64
Singer	15-16		West	6294	1261	5625		6122	4117	534	189	894		3034	3780	66	1637	425	4585	2176	1514		5051	4815	5355	sc	6-8	20	129						
	17-18-19	17-18	West	6243	1317	5584	5841	6106	4005	617	189	831	3427	3203	3514	4	1643	479	4560	2025	1518					sc	6-8	20	129						
	20		West	6242	1341	5534	5865	6111		222			3427			46		4637	2056	1518					sc	6-8	18	129							
Skeleton	21	35		6203									</																						

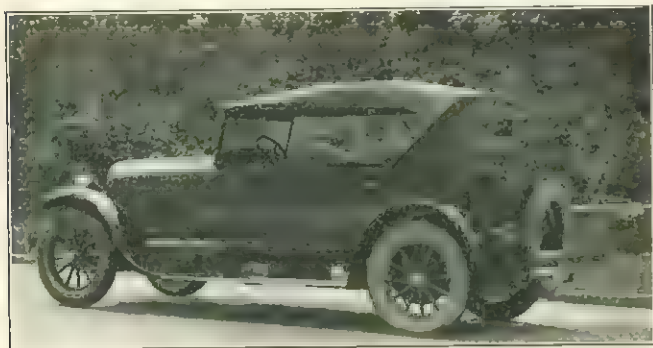


Car	Year	Model	Electric System	STORAGE BATTERIES																				LAMPS														
				Ray	U. S. L.	Bent-Cat	Cole	Utility	Columbia	Eveready	Exide	Gould	Hartford	Philadelphia Grid	Presto-Lite	Titan	Universal	Vesta	Westinghouse	Willard	Witherbee	Cincinnati	Marko	Haisler	Base Contact	HEAD		SIDE		REAR		INSTRUMENT						
																										Volts	C. P.	Marks No.	Volts	C. P.	Marks No.	Volts	C. P.	Marks No.	Volts	C. P.	Marks No.	
Templar	20	445		62	1172	5584	5837	6106	4055	614	218	831				6	275		2008	1510	4970				6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63		
Thomas	14		L-N	1284				6158	4147		199	981		3051	3801	108	1699	445		2196	1554	5104	4878	5343		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Thomas Tr.	15-16-17		L-N	1163		5944		6149	4090	586	241		3442	3163	3734	86		404	4598	2153	1609		4846	5232		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	17	40, 70		6224	1102			6144	4194		210			3669												6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	18	R. S.		6312	1159	5657		6144	4088			916		3161	3732	85	1657		4607	2149	1602	4969		5229		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	19	R. S.		6205	1138	5535	5885	6113	4168			896		3003	3702	21	1831		4517	2136	1518	5025		5221		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	17		West	6244	1335		5862	6109	4017					3218	3613				4627							6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	18			6304	1223	5665		6111	4194				3471	3222	3532	88	1656		4634	2081	1504	5070		5293		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tiffin	20	5, 6 Ton	Light					6111	4194										4627	2084	1518					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Triangle	19-20	A, B									173										1510					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Triangle	21	AA	NE	6242							173															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Transport	20	20, 30, 50		6200				4003			829			3429	2992	3685					1506					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Trumbull	16	A	W-L		1116	5517			530				3429	2992	3685											6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tulsa	18	B, C	W-L		1116	5517			530				3429	2992	3685											6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tulsa	19	D-1	Dyne	6201	1300	5555	5829	6102	4000	609	215	831	3404	3190	3500	26	1641		4550	2011	1504	4953	4793	5275		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tulsa	19	D-1	Dyne	6201	1300	5555	5829	6106		609		829		3190		26			4550	2011	1504	4953	4793			6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tulsa	20	D-1, 2, 3	Delco	6200			5829	6106	4000		215	829		3190	3500				4550							6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Tulsa	1	E 1-2-3	Dyne			5584					215															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Union	20	Truck									170															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
U. S.	19	Truck									175															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
U. S.	20	Truck		6242							175															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
U. S.	20	Truck									175															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Universal	15										175															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Universal	16	15-Ser-15	Remy	6244	1316	5572	5847	6106	4007	614	217	831	3428	3204	3586	6	1643		362	4558	2029	1510	4973	4798	5275		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	16	22-Ser-22	Remy	6209	1302	5544	5834	6102	4002	607	217	829	3420	3191	3507	26	1641		454	4546	2012	1504	4955	4795	5266		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	16-17	B well 27	Remy	6244	1316	5572	5847	6106	4007	614	217	890	3428	3204	3586	6	1643		470	4558	2029	1510	4973	4798	5275		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	16-17	B well 28	Remy	6209	1302	5544	5834	6102	4002	607	217	829	3423	3191	3507	26	1641		458	4546	2012	1504	4955	4795	5266		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	18	38	Remy	6209	1307	5544	5847	6106	4002	607	217	831	3423	3091	3507	26	1641		457	4546	2012	1510	4955	4795	5266		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	18-19	39		6256	1328	5544	5812	6106	4007	615	215			3423	3073	3522			470	4563		1510	4973	4796	5266		6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	20	48	Bi-jur	6242	1318	5571	5806	6106	4006	617	218	831										1510					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	20	34		6200	1307			6106	4006	609					3500	34			454			1510	4955				6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63
Universal	20	38				5544		6106	4006										4546	2010	1510	4955				6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Vellie Tr.	20			6293	1351			4188											4647	2207						6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Walker-J. n.	19-20										176										1504					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Walker-J. n.	21	B	Emse								174															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Watson	19										171										1510					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Watson	20										218										1510					6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Watson	21	B	Dyne	6242							218															6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Vim	18	21												3190	3505						2011	1504				6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Vim	19-20	21		6201			5829	6106													2011	1504				6-8	20	129	6-8	5	81	6-8	5	81	6-8	2	63	
Vulcan	14		West	6258		5507		6106	4162	570	</																											



## Jordan "Blue Boy" Latest Offering

The "Blue Boy" in "Blue Devil" blue is the characteristic name of a new Jordan four passenger car, which went into production during August. The wheelbase of this model has lengthened to 124½ inches for sporty lowness and the car rides close to the ground. The cushions hug the floor. The general shape of the body is the same as the "Playboy" model as far back as the front seat. A slight curve has been added to the back of the front seat. The



JORDAN FOUR-PASSENGER "BLUE BOY" MODEL

rear of the body is low and does not have the sweeping curve on the back panel that is found in the touring car.

The sides of the body are three-quarters of an inch lower than the touring body and because of the extra 4½ inches added to the wheelbase a liberal door opening is provided.

Upholstery is in dark blue Morocco leather, put on without plaits. A roll is incorporated at the front edge of the cushions, furnishing a support for the knees. Seat cushions are very low, being set right on the floor with just enough pitch to make them unusually comfortable. Long curled hair and Marshall cushion and back spring add to their riding qualities. A heavy strap of tan leather with a distinctive nickel-plated brass buckle, and heavy polished aluminum end brackets serves as a robe strap and adds greatly to the appearance of the interior. There is a wool carpet on the tonneau floor. The foot rest is all brass nickel-plated.

Running boards are covered with black ribbed rubber instead of the conventional linoleum and there are aluminum kick plates to protect the running board filler. The top is of the Golde type, with a polished rust proof frame, and natural wood finished bows. Top material is imported Burbank. Burbank side curtains and slip cover are standard equipment. Curtains and curtain rods are stored in the right front and rear doors, leaving the left rear door free for carrying odds and ends. The top is 2½ inches lower at the sides and 4 inches lower at the rear.

Tires are 32 x 4½ in.; cords, which are oversize for this model. The windshield is silvering quality, plate glass, of one piece construction like that used on the Jordan "Play Boy." There is a new type steering wheel with walnut spokes. Small spark and throttle control are mounted in a small space at the center of the wheel without the conventional aluminum sector.

There is a trunk rack on the rear with a rubber covered platform, and polished cast aluminum bars with blackened grooves. Additional aluminum bars to match are fastened on the back panel of the body. The trunk itself, which is furnished as standard equipment, is covered with black Fabricoid with locks and corner tips of brass, nickel-plated. This trunk

contains two good sized suit cases, with an additional space at the end to carry golf shoes, packages or other articles.

A gasoline gauge showing the exact number of gallons of gas in the tank is mounted on the side of the trunk carrier bracket, right near the filler. Small tools are carried in the left hand front door as on all Jordan models, and the larger tools are stored in a special box mounted on the left hand running board. This box is covered with the same material as the trunk on the rear of the body and has brass nickel-plated locks and corner tips.

Head lights are all brass nickel-plated and are of the new barrel type design. Bumpers are standard equipment front and rear, and there is nickel-plated windshield cleaner. The Blue Boy is listed at \$2,150 f. o. b. Cleveland.

## New Indiana Speed Truck Announced

A new Indiana one-ton speed truck, known as the "Highway Express," will make its appearance on the market shortly, according to an announcement just made by the Indiana Truck Corp., Marion, Indiana.

This model will embody several new features in speed truck construction, it is announced. The new job has been under test on the road for several months, and the factory is preparing to swing into quantity production. The wheelbase is 132 in. and the price of the chassis \$1,425.

The rear axle is a spiral bevel drive, semi-floating type. The engine is a special Waukesha, built under the direct supervision of the company, with 3¾ x 5¾ in. cylinders, and a three bearing crankshaft. The bearing dimensions are: Front, 2 x 2¼ in.; rear, 2 x 3 in.; connecting rod bearing, 2 x 2¼ in.; piston pin bearing, 1 x 2 in.

The truck will be equipped with disc steel wheels, and 34 x 5 in. pneumatic tires, all around, and electric lights and starter, which will be standard equipment.



INDIANA SPEED TRUCK CHASSIS

A special designed pressed steel frame is one of the features of the new speed truck. Some unique features in trussing and gusseting have been employed. The frame is of pressed steel construction 5 7/16 in. deep, with 3¼ in. flange.

The spring construction is three-quarter elliptic, both front and rear, the principal feature of which is the arrangement of the leaves, and the elimination of all shackles and ground bolts, no lubrication being necessary. This type of spring is said to be especially advantageous for a speed truck, for it gives added protection to the load, and the drive is through the springs, and the driving strains are carried by a number of main plates instead of one main plate as in the conventional type.

Geo. W. Mason has been appointed works manager of the Maxwell Motor Corp.



# A New Battery or An Old One?

Every car owner who prefers a *new battery* to an *old one* is on the side of bone-dry shipment and stocking of batteries, because the battery is kept brand new until prepared for active use.

Willard Threaded Rubber Insulation is the battery feature that makes true bone-dry battery shipment possible.

---

WILLARD STORAGE BATTERY COMPANY, Cleveland, Ohio  
*Made in Canada by the Willard Storage Battery Co. of Canada, Limited, Toronto, Ontario*

---

**Willard** THREADED  
RUBBER  
BATTERY



# List Price of Storage Batteries for Cars From 1915 to 1921

## REVISED MONTHLY

HOW TO USE THIS TABLE.—These prices are consumers prices of standard batteries, F.O.B. Home Office. Freight and express charges will have to be added. Weight of battery is given for this purpose. Look in Electrical Specifications Department for name and year and model of car: Find the serial number under the battery desired; look in this table for that serial number and you will find the battery that will fit that car. Be sure and give the type number and order, or part number, in ordering. Do not pay any attention to serial number, as that is created by us to enable you to find the right battery quickly. Prices here given are taken from the latest price lists we have been able to obtain from manufacturers, and will be submitted to manufacturers each month for revision. This compilation is for the benefit of the trade. We have used every care to give the latest, authentic information, but we do not guarantee the correctness of these prices and cannot be held liable for same.

THE FERGUSON PUBLISHING COMPANY

Serial No.	TITAN				Serial No.	TITAN				Serial No.	EXIDE				Serial No.	VESTA				Serial No.	VESTA										
	Type with Terminal January 4, 1922	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.		Type with Terminal January 4, 1922	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.		Type and Cat. No. Prices exclusive of Terminals July 15th 1922 Includes Federal Taxes	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.		Type & Form No. Subj. to 10% Disc. May 15th, 1922 Including Federal Tax	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.		Type & Form No. Subj. to 10% Disc. May 15th, 1922 Including Federal Tax	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price						
1	CG15-6DW	6	83	28	00	CG16-12E (B or X)	12	84	114	57	70	180	6X11-1	12	84	53	50	260	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20				
2	CG15-6D (B or X)	6	83	28	00	CG16-12E (B or X)	12	84	114	57	70	180	6X11-1	12	84	53	50	260	6DU19W-21	6	51	8	344	6DU15Y-1156	6	33	65				
3	CG15-6J (B or X)	6	83	28	00	CG16-12E (B or X)	12	84	114	57	70	180	6X11-1	12	84	53	50	260	6DU19W-21	6	51	8	344	6DU15Y-1156	6	33	65				
4	CG16-6AW	6	103	73	32	00	CG17-12E (B or X)	12	73	108	52	30	172	6X11-1	12	73	108	52	30	172	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
5	CG16-6AZ	6	103	73	32	00	CG17-12E (B or X)	12	73	108	52	30	172	6X11-1	12	73	108	52	30	172	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
6	CG16-6A (B or X)	6	103	73	32	00	CG17-12E (B or X)	12	73	108	52	30	172	6X11-1	12	73	108	52	30	172	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
7	CSR6-60DW	6	71	53	26	00	CSR6-60DW (B or X)	12	45	62	28	58	60	6X11-1	12	45	62	28	58	60	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
8	CSR6-60DZ	6	71	53	26	00	CSR6-60DZ (B or X)	12	45	62	28	58	60	6X11-1	12	45	62	28	58	60	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
9	CSR6-80AW	6	88	64	30	70	CSR6-80AW (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
10	CSR6-80AZ	6	88	64	30	70	CSR6-80AZ (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
11	CSR6-80AY	6	88	64	30	70	CSR6-80AY (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
12	CSR6-80A (B or X)	6	88	64	30	70	CSR6-80A (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
13	CSR6-80D (B or X)	6	88	64	30	70	CSR6-80D (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
14	CSR6-100AW	6	105	73	35	80	CSR6-100AW (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
15	CSR6-100AZ	6	105	73	35	80	CSR6-100AZ (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
16	CSR6-100A (B or X)	6	105	73	35	80	CSR6-100A (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
17	CSR6-100DW	6	105	73	35	80	CSR6-100DW (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
18	CSR6-100D (B or X)	6	105	73	35	80	CSR6-100D (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
19	CSR6-120AW	6	142	88	42	90	CSR6-120AW (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
20	CSR6-120AZ	6	142	88	42	90	CSR6-120AZ (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
21	CSR6-120A (B or X)	6	142	88	42	90	CSR6-120A (B or X)	12	39	73	39	50	182	6X11-1	12	39	73	39	50	182	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
22	SR6-100AZ	6	176	6	102	50	SR6-100AZ (B or X)	12	18	55	128	61	00	196	6X11-1	12	18	55	128	61	00	196	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
23	SR6-100A (B or X)	6	176	6	102	50	SR6-100A (B or X)	12	18	55	128	61	00	196	6X11-1	12	18	55	128	61	00	196	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
24	SR6-100D (B or X)	6	176	6	102	50	SR6-100D (B or X)	12	18	55	128	61	00	196	6X11-1	12	18	55	128	61	00	196	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
25	CG15-6A (B or X)	6	83	28	00	CG16-12E (B or X)	12	84	114	57	70	180	6X11-1	12	84	53	50	260	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20				
26	CG16-6A (B or X)	6	83	28	00	CG16-12E (B or X)	12	84	114	57	70	180	6X11-1	12	84	53	50	260	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20				
27	CG16-6B (B or X)	6	103	73	32	00	CG17-12E (B or X)	12	73	108	52	30	172	6X11-1	12	73	108	52	30	172	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
28	CG17-6A (B or X)	6	124	83	37	90	CG17-6A (B or X)	12	24	32	126	67	30	201	6X11-1	12	24	32	126	67	30	201	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
29	CG17-6B (B or X)	6	124	83	37	90	CG17-6B (B or X)	12	24	32	126	67	30	201	6X11-1	12	24	32	126	67	30	201	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
30	CG17-6D (B or X)	6	124	83	37	90	CG17-6D (B or X)	12	24	32	126	67	30	201	6X11-1	12	24	32	126	67	30	201	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20
31	CG17-6A (B or X)	6	144	94	41	00	CG17-6A (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
32	CG17-6B (B or X)	6	144	94	41	00	CG17-6B (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
33	CG17-6D (B or X)	6	144	94	41	00	CG17-6D (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
34	CG17-6A (B or X)	6	144	94	41	00	CG17-6A (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
35	CG17-6B (B or X)	6	144	94	41	00	CG17-6B (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
36	CG17-6D (B or X)	6	144	94	41	00	CG17-6D (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
37	CG17-6A (B or X)	6	144	94	41	00	CG17-6A (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
38	CG17-6B (B or X)	6	144	94	41	00	CG17-6B (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
39	CG17-6D (B or X)	6	144	94	41	00	CG17-6D (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
40	CG17-6A (B or X)	6	144	94	41	00	CG17-6A (B or X)	12	71	103	53	00	187	6X11-1	12	71	103	53	00	187	6DU13W-8	6	36	75	343	6DU15Y-1155	6	33	20		
41	CG17-6B (B or X)	6	144	94																											



VESTA Type & Form No. Subj. to 10% Disc. May 15th, 1922 Including Federal Tax										EVEREADY Type & Stock No. F.O.B. Indianapolis Ind. June 20th 1922										EVEREADY Type and Stock No. F.O.B. Indianapolis Ind. June 20th 1922										GOULD Type and Part No. July 1st, 1922 Prices Include Excise Tax										U S L Type and Form Prices Include Federal Excise Tax Sept 15, 1922									
Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amps. Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price																				
428	6	38.50	35.50	525	6	95	53	27.00	602	24	35	118	.....	875	1863	18	.....	1101	AXB-307X127	6	35	30	21.80																										
429	6	46.10	42.10	526	6	95	53	27.00	602	24	35	118	.....	876	1863	24	.....	1102	AXB-309X127	6	36	30	23.60																										
430	6	46.10	42.10	527	6	95	53	29.00	603	24	35	118	.....	877	1863	24	.....	1103	AXB-309X127	6	36	30	22.60																										
431	6	46.10	42.10	528	6	95	53	28.00	603	24	35	118	.....	878	1863	24	.....	1104	AXB-311X-91E	6	36	30	25.10																										
432	6	46.10	42.10	529	6	95	53	28.00	604	24	35	118	.....	879	1863	24	.....	1105	AXB-311X-91E	6	36	30	25.10																										
433	6	46.10	42.10	530	6	95	53	28.00	604	24	35	118	.....	880	1863	24	.....	1106	AXB-311X-91E	6	36	30	25.10																										
434	6	46.10	42.10	531	6	95	53	28.00	604	24	35	118	.....	881	1863	24	.....	1107	AXB-311X-91E	6	36	30	25.10																										
435	6	46.10	42.10	532	6	95	53	28.00	604	24	35	118	.....	882	1863	24	.....	1108	AXB-311X-91E	6	36	30	25.10																										
436	6	46.10	42.10	533	6	95	53	28.00	604	24	35	118	.....	883	1863	24	.....	1109	AXB-311X-91E	6	36	30	25.10																										
437	6	46.10	42.10	534	6	95	53	28.00	604	24	35	118	.....	884	1863	24	.....	1110	AXB-311X-91E	6	36	30	25.10																										
438	6	46.10	42.10	535	6	95	53	28.00	604	24	35	118	.....	885	1863	24	.....	1111	AXB-311X-91E	6	36	30	25.10																										
439	6	46.10	42.10	536	6	95	53	28.00	604	24	35	118	.....	886	1863	24	.....	1112	AXB-311X-91E	6	36	30	25.10																										
440	6	46.10	42.10	537	6	95	53	28.00	604	24	35	118	.....	887	1863	24	.....	1113	AXB-311X-91E	6	36	30	25.10																										
441	6	46.10	42.10	538	6	95	53	28.00	604	24	35	118	.....	888	1863	24	.....	1114	AXB-311X-91E	6	36	30	25.10																										
442	6	46.10	42.10	539	6	95	53	28.00	604	24	35	118	.....	889	1863	24	.....	1115	AXB-311X-91E	6	36	30	25.10																										
443	6	46.10	42.10	540	6	95	53	28.00	604	24	35	118	.....	890	1863	24	.....	1116	AXB-311X-91E	6	36	30	25.10																										
444	6	46.10	42.10	541	6	95	53	28.00	604	24	35	118	.....	891	1863	24	.....	1117	AXB-311X-91E	6	36	30	25.10																										
445	6	46.10	42.10	542	6	95	53	28.00	604	24	35	118	.....	892	1863	24	.....	1118	AXB-311X-91E	6	36	30	25.10																										
446	6	46.10	42.10	543	6	95	53	28.00	604	24	35	118	.....	893	1863	24	.....	1119	AXB-311X-91E	6	36	30	25.10																										
447	6	46.10	42.10	544	6	95	53	28.00	604	24	35	118	.....	894	1863	24	.....	1120	AXB-311X-91E	6	36	30	25.10																										
448	6	46.10	42.10	545	6	95	53	28.00	604	24	35	118	.....	895	1863	24	.....	1121	AXB-311X-91E	6	36	30	25.10																										
449	6	46.10	42.10	546	6	95	53	28.00	604	24	35	118	.....	896	1863	24	.....	1122	AXB-311X-91E	6	36	30	25.10																										
450	6	46.10	42.10	547	6	95	53	28.00	604	24	35	118	.....	897	1863	24	.....	1123	AXB-311X-91E	6	36	30	25.10																										
451	6	46.10	42.10	548	6	95	53	28.00	604	24	35	118	.....	898	1863	24	.....	1124	AXB-311X-91E	6	36	30	25.10																										
452	6	46.10	42.10	549	6	95	53	28.00	604	24	35	118	.....	899	1863	24	.....	1125	AXB-311X-91E	6	36	30	25.10																										
453	6	46.10	42.10	550	6	95	53	28.00	604	24	35	118	.....	900	1863	24	.....	1126	AXB-311X-91E	6	36	30	25.10																										
454	6	46.10	42.10	551	6	95	53	28.00	604	24	35	118	.....	901	1863	24	.....	1127	AXB-311X-91E	6	36	30	25.10																										
455	6	46.10	42.10	552	6	95	53	28.00	604	24	35	118	.....	902	1863	24	.....	1128	AXB-311X-91E	6	36	30	25.10																										
456	6	46.10	42.10	553	6	95	53	28.00	604	24	35	118	.....	903	1863	24	.....	1129	AXB-311X-91E	6	36	30	25.10																										
457	6	46.10	42.10	554	6	95	53	28.00	604	24	35	118	.....	904	1863	24	.....	1130	AXB-311X-91E	6	36	30	25.10																										
458	6	46.10	42.10	555	6	95	53	28.00	604	24	35	118	.....	905	1863	24	.....	1131	AXB-311X-91E	6	36	30	25.10																										
459	6	46.10	42.10	556	6	95	53	28.00	604	24	35	118	.....	906	1863	24	.....	1132	AXB-311X-91E	6	36	30	25.10																										
460	6	46.10	42.10	557	6	95	53	28.00	604	24	35	118	.....	907	1863	24	.....	1133	AXB-311X-91E	6	36	30	25.10																										
461	6	46.10	42.10	558	6	95	53	28.00	604	24	35	118	.....	908	1863	24	.....	1134	AXB-311X-91E	6	36	30	25.10																										
462	6	46.10	42.10	559	6	95	53	28.00	604	24	35	118	.....	909	1863	24	.....	1135	AXB-311X-91E	6	36	30	25.10																										
463	6	46.10	42.10	560	6	95	53	28.00	604	24	35	118	.....	910	1863	24	.....	1136	AXB-311X-91E	6	36	30	25.10																										
464	6	46.10	42.10	561	6	95	53	28.00	604	24	35	118	.....	911	1863	24	.....	1137	AXB-311X-91E	6	36	30	25.10																										
465	6	46.10	42.10	562	6	95	53	28.00	604	24	35	118	.....	912	1863	24	.....	1138	AXB-311X-91E	6	36	30	25.10																										
466	6	46.10	42.10	563	6	95	53	28.00	604	24	35	118	.....	913	1863	24	.....	1139	AXB-311X-91E	6	36	30	25.10																										
467	6	46.10	42.10	564	6	95	53	28.00	604	24	35	118	.....	914	1863	24	.....	1140	AXB-311X-91E	6	36	30	25.10																										
468	6	46.10	42.10	565	6	95	53	28.00	604	24	35	118	.....	915	1863	24	.....	1141	AXB-311X-91E	6	36	30	25.10																										
469	6	46.10	42.10	566	6	95	53	28.00	604	24	35	118	.....	916	1863	24	.....	1142	AXB-311X-91E	6	36	30	25.10																										
470	6	46.10	42.10	567	6	95	53	28.00	604	24	35	118	.....	917	1863	24	.....	1143	AXB-311X-91E	6	36	30	25.10																										
471	6	46.10	42.10	568	6	95	53	28.00	604	24	35	118	.....	918	1863	24	.....	1144	AXB-311X-91E	6	36	30	25.10																										
472	6	46.10	42.10	569	6	95	53	28.00	604	24	35	118	.....	919	1863	24	.....	1145	AXB-311X-91E	6	36	30	25.10																										
473	6	46.10	42.10	570	6	95	53	28.00																																									



U. S. L. Type and Form Prices Include Federal Excise Tax Sept. 15, 1922										U.S.L. Type and Form Prices Federal Excise Tax Included Sept. 15, 1922										WITHERBEE August 1st 1922 Federal Tax Not Included										UNIVERSAL Type and Assembly Federal Tax Not Included January 10, 1922										WILLARD Including Federal Excise Tax Type and Part No. July 1, 1922 F.O.B. Cleveland																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Type and Form	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
1211	CDX-313Z37A	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80	1577	9R-11-S	18	80	125	67.00	1687	MS-617B	6	106	50	28 15	1324	HDX-313Z82D	6	117	54 1/2	28 80</



WILLARD Including Federal Excise Tax Type and Part No. July 1, 1922 F. O. B. Cleveland, O.					WILLARD Including Federal Excise Tax Type and Part No. July 1, 1922 F. O. B. Cleveland, O.					WILLARD Including Federal Excise Tax Type and Part No. July 1, 1922 F. O. B. Cleveland, O.					WILLARD Including Federal Excise Tax Type and Part No. July 1, 1922 F. O. B. Cleveland, O.									
Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Price		Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Price		Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Price		Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Price						
2053	SJW5-71721-Q133- Q133	6	132	43.60	2087	SLW3-41503-Q582- Q583	6	79	24.00	2117	SMR4-30601-Q581- Q584	6	84	31.85	2145	SMR26-30313-P17-27 No. 4-P14-28 No. 4 P17-34 No. 4-P14- 36 No. 4	12	37	35.40	2188	SSBR1231 2400-P19 18 No. 4-P19-18	12	37	50.10
2054	SJR5-70703-Q581- Q584	6	132	52.70	2088	SLR3-40503-Q585- Q588	6	79	28.95	2117	SMW4-31601-Q581- Q584	6	84	27.35	2145	SMW26-31313-P17- 27 No. 4-P14-28- No. 4-P17-34 No. 4 P14-36 No. 4	12	37	30.85	2189	SSBR1231 2291-P19 -21 No. 4-P19-9	12	37	50.10
2054	SJW5-71703-Q581- Q584	6	132	43.60	2088	SLW3-41503-Q585- Q588	6	79	24.00	2118	SMR4-30601-Q586- Q588	6	84	31.85	2145	SMW26-31313-P17- 27 No. 4-P14-28- No. 4-P17-34 No. 4 P14-36 No. 4	12	37	30.85	2190	SSBR1231 2307-P19 14 1/2 No. 4-P19- 19 1/2 No. 4	12	37	50.10
2055	SJR5-70703-Q133- Q133	6	132	52.70	2089	SLR3-40503-Q581- Q584	6	79	28.95	2118	SMW4-31601-Q586- Q588	6	84	27.35	2146	SMR27-30411-P13- 18 No. 4	12	37	30.85	2191	SSBR125-2301-P13- 18 No. 4-P13-18 No. 4-P13-12 No. 4-P13- 12 No. 4	12	52	61.00
2055	SJW5-71703-Q133- Q133	6	132	43.60	2089	SLW3-41503-Q581- Q584	6	79	24.00	2119	SMR4-30601-Q133- Q133	6	84	31.85	2146	SMW27-31411-P13- 18 No. 4	12	52	61.00	2191	SSBR125-2301-P13- 18 No. 4-P13-18 No. 4-P13-12 No. 4-P13- 12 No. 4	12	52	61.00
2056	SJR6-70801-Q213- Q212	6	153	59.00	2090	SLR3-40503-Q586- Q588	6	79	28.95	2119	SMW4-31601-Q133- Q133	6	84	27.35	2146	SMW27-31411-P13- 18 No. 4	12	52	61.00	2192	SSBR125-2301-P13- 18 No. 4-P13-30	12	52	61.00
2056	SJW6-71801-Q213- Q212	6	153	48.60	2090	SLW3-41503-Q586- Q588	6	79	24.00	2120	SMR4-30623-Q213- Q212	6	84	31.85	2147	SMR27-30411-Q133- Q133	12	52	61.00	2193	NSSBR125-2295-P13 18 No. 4-P13-27	12	52	61.00
2057	SJR6-70801-Q133- Q133	6	153	59.00	2091	SLR3-40503-Q630- Q631	6	79	28.95	2120	SMW4-31623-Q213- Q212	6	84	27.35	2147	SMW27-31411-Q133- Q133	12	52	50.65	2194	SSBR126-2298-P13- 11 1/2 No. 4-P13- 21 1/2	12	52	.....
2057	SJW6-71801-Q133- Q133	6	153	48.60	2091	SLW3-41503-Q630- Q631	6	79	24.00	2121	SMR4-30623-Q582- Q584	6	84	31.85	2148	SMR27-30431-Q77- Q80	12	52	61.00	2194	SSBR126-2298-P13- 11 1/2 No. 4-P13- 21 1/2	12	67	70.90
2058	SJR6-70821-Q133- Q133	6	153	59.00	2092	SLR3-40503-Q213- Q212	6	79	28.95	2121	SMW4-31623-Q582- Q584	6	84	27.35	2148	SMW27-31431-Q77- Q80	12	52	50.65	2195	SSBR129-2302-Q581- Q583	12	84	80.75
2058	SJW6-71821-Q133- Q133	6	153	48.60	2092	SLW3-41503-Q213- Q212	6	79	24.00	2122	SMR4-30623-Q584- Q583	6	84	31.85	2149	SMR28-30513-Q77- Q80	12	67	70.90	2196	SSBR1210-2401-P12- 9 No. 4-P12-9	12	101	91.70
2059	SJR6-70821-Q213- Q212	6	153	59.00	2094	SLR3-40522-Q133- Q133	6	79	28.95	2122	SMW4-31623-Q584- Q583	6	84	27.35	2149	SMW28-31513-Q77- Q80	12	67	58.15	2197	SSBR1210-2401- Q581-Q583	12	101	91.70
2059	SJW6-71821-Q213- Q212	6	153	48.60	2094	SLW3-41522-Q133- Q133	6	79	24.00	2123	SMR4-30623-P12-9 No. 2-P12-53 No. 2	6	84	31.85	2150	SMR28-30513-P13- 18 No. 4	12	67	70.90	2198	SSBR183 2287-P10- 30 No. 4-P19-30	18	37	72.75
2060	SJR6-340-Q114-Q116	6	153	59.00	2095	SLR3-40522-Q581- Q584	6	79	28.95	2123	SMW4-31623-P12-9 No. 2-P12-53 No. 2	6	84	27.35	2150	SMW28-31513-P13- 18 No. 4	12	67	58.15	2199	SSBR185-2306-P13- 12 No. 4-P13-30	18	52	90.45
2061	SJW26-2623-Q73-Q76	12	49	.....	2095	SLW3-41522-Q581- Q584	6	79	24.00	2124	SMR4-30603-Q581- Q584	6	84	31.85	2151	SMR29-30615-Q582- Q583	12	84	80.75	2200	SSBR186-2308-P13- 12 No. 4-P13-30	18	67	103.95
2062	SJR26-2625-Q118- Q121	12	49	.....	2096	SLR3-2315-Q585- Q588	6	79	28.95	2124	SMW4-31603-Q581- Q584	6	84	27.35	2151	SMW29-31615-Q582- Q583	12	84	65.65	2201	SSBR242-2294-P20- 18 No. 6-P20-18	24	22	74.05
2062	SJW26-2623-Q118- Q121	12	49	.....	2096	SLW3-2314-Q585- Q588	6	79	24.00	2125	SMR4-30603-P12-13 No. 4-P12-8 No. 4	6	84	31.85	2152	SMR29-30613-Q581- Q584	12	84	80.75	2202	STRN1-5422-Q152- Q154	6	57	37.55
2063	SJR26-2625-Q138- Q138	12	49	.....	2097	SLR4-40601-Q586- Q588	6	98	34.30	2125	SMW4-31603-P12-13 No. 4-P12-8 No. 4	6	84	27.35	2152	SMW29-31613-Q581- Q584	12	84	65.65	2203	STRN2-5424-Q187- Q133	6	80	47.70
2063	SJW26-2623-Q138- Q138	12	49	.....	2097	SLW4-41601-Q586- Q588	6	98	29.25	2126	SMR4-30606-Q581- Q584	6	84	31.85	2153	SMR30-30714-P12-18 No. 4	12	101	91.70	2204	STRN2-5424-Q213- Q212	6	80	47.70
2064	SJR26-2625-Q73-Q76	12	49	.....	2098	SLR4-40601-Q133- Q133	6	98	34.30	2127	SMR5-30701-P12-18 No. 2	6	101	47.00	2154	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2205	STRN3-5428-Q187- Q133	6	104	58.10
2065	SJR26-2625-Q73-Q76	12	49	.....	2098	SLW4-41601-Q133- Q133	6	98	29.25	2128	SMR5-30701-Q582- Q584	6	101	47.00	2155	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2206	STRN4-5428-Q187- Q133	6	128	68.30
2065	SJW26-2623-Q73-Q75	12	49	.....	2099	SLR4-40601-P12-15- No. 2-P12-15 No. 2	6	98	34.30	2128	SMW5-31701-Q582- Q584	6	101	38.10	2156	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2207	STRN4-5428-Q213- Q212	6	128	68.30
2066	SJR26-2625-Q73- Q74-Q75-Q76	12	49	.....	2099	SLW4-41601-P12-15- No. 2-P12-15 No. 2	6	98	29.25	2129	SMR5-30701-P12- 15 1/2 No. 0-P12- 18 1/2 No. 0	6	101	47.00	2157	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2208	SXR3-385-Q133-Q133	6	79	34.70
2066	SJW26-2623-Q73- Q74-Q75-Q76	12	49	.....	2100	SLR4-40601-Q78-Q80	6	98	34.30	2129	SMW5-31701-P12- 15 1/2 No. 0-P12- 18 1/2 No. 0	6	101	38.10	2158	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2209	SXR3-385-Q77-Q80	6	79	34.70
2067	SJR26-2637-2-Q73- Q76	12	49	.....	2100	SLW4-41601-Q78- Q80	6	98	29.25	2130	SMR5-30701-Q133- Q133	6	101	47.00	2159	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2210	SXR3-2173-Q133- Q138	6	79	34.70
2067	SJW26-2652-2-Q73- Q76	12	49	.....	2101	SLR4-40601-Q582- Q584	6	98	34.30	2130	SMW5-31701-Q133- Q133	6	101	38.10	2160	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2211	SXR26-395-Q73-Q76	12	43	47.00
2068	SJR27-70411-Q133- Q133	12	69	66.35	2101	SLW4-41601-Q582- Q584	6	98	29.25	2131	SMR5-30721-Q131- Q131	6	101	47.00	2161	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2212	SXR26-395-Q138- Q138	12	43	47.00
2068	SJW27-71411-Q133- Q133	12	69	56.15	2102	SLR4-40623-Q139- Q587	6	98	34.30	2131	SMW5-31721-Q131- Q131	6	101	47.00	2162	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2213	SXR26-395-Q73-Q76	12	43	47.00
2069	SJR27-70431-Q133- Q133	12	69	66.35	2102	SLW4-41623-Q139- Q587	6	98	29.25	2132	SMR5-30721-Q581- Q584	6	101	47.00	2163	SMR37-30362-P14-18 No. 4-P17-18 No. 4	16	37	66.00	2214	SXR77-2015-Q159- Q162	24	...	79.10
2069	SJW27-71431-Q133- Q133	12	69	56.15	2103	SLR5-4-																		



PHILADELPHIA DIAM'D GRID Type & Part No. Includes Federal Excise Tax Prices without Ter June 15th 1922										PHILADELPHIA DIAM'D GRID Type & Part No. Includes Federal Excise Tax Prices without Ter June 15th 1922										PHILADELPHIA DIAM'D GRID Type & Part No. Includes Federal Excise Tax Prices without Ter June 15th 1922										HARTFORD January 10, 1922 Do not Include Excise Tax Type										PREST-O-LITE Type and Replacement No. June 19, 1922									
Serial No.	Volts	Amperes for 20 min.	Weight	Price	Serial No.	Volts	Amperes for 20 min.	Weight	Price	Serial No.	Volts	Amperes for 20 min.	Weight	Price	Serial No.	Volts	Amperes for 20 min.	Weight	Price	Serial No.	Volts	Amperes for 20 min.	Weight	Price	Serial No.	Volts	Amperes for 20 min.	Weight	Price																				
2885	116L-A	6	60	44	24.00	3096	112LM-E-1	12	35	87	34.00	1209	136-LS-A-9	6	120	55	34.00	3458	6A11FZ	12	90	70	49.50	3569	611RHN	6	16	45	24.75																				
2886	116L-A-2	6	60	44	24.00	3097	112LM-E-1	6 &	12	50	81	51.50	3211	136-LS-A-15	6	120	55	34.00	3459	6A11L	12	90	70	49.50	3570	611RHN	2051	6	16	45	24.75																		
2887	136L-A	6	60	29	00	3098	112LM-E-1	6 &	12	50	81	51.50	3212	136-LS-A-16	6	120	55	34.00	3460	6A11LR	12	90	70	49.50	3571	611RHN	2054	6	16	45	24.75																		
2888	136L-A-5	6	60	29	00	3099	112LM-E-5	6 &	12	50	81	51.50	3213	136-LS-A-17	6	120	55	34.00	3461	6A11LUR	12	90	70	49.50	3572	611RHN-2	2056	6	16	45	24.75																		
2889	136L-A-8	6	60	29	00	3100	112LM-E-8	6 &	12	50	81	51.50	3214	136-LS-A-21	6	120	55	34.00	3462	6A11LUZ	12	90	70	49.50	3573	611RHN-2	2061	6	16	45	24.75																		
2890	136L-A-11	6	60	29	00	3101	112LM-E-11	6 &	12	50	81	51.50	3215	136-LS-A-22	6	120	55	34.00	3463	6A11LV	12	90	70	49.50	3574	611RHN-2	2062	6	16	45	24.75																		
2891	136L-A-2	6	60	29	00	3102	112LM-E-1	6 &	12	50	81	51.50	3216	136-LS-A-25	6	120	55	34.00	3464	6A11LYR	12	90	70	49.50	3575	611RHN-2	2070	6	16	45	24.75																		
2892	136L-D	6	60	29	00	3103	112LM-E-2	6 &	12	50	81	51.50	3217	W-156-LS-A	6	120	55	34.00	3465	6A11LYV	12	90	70	49.50	3576	611RHN-2	2071	6	16	45	24.75																		
2893	136L-D-4	6	60	29	00	3104	116L-A-1	6	100	42	33	30	3218	156-LS-A	6	145	63	41	50	3466	6A11LYW	12	90	70	49.50	3577	611RHN-2	2072	6	16	45	24.75																	
2894	136L-D-7	6	60	29	00	3105	116L-A-6	6	100	42	33	30	3219	156-LS-A-2	6	145	63	41	50	3467	6A11LYZ	12	90	70	49.50	3578	613RHN	2100	6	20	52	29.00																	
2895	136L-D-6	6	60	29	00	3106	116L-A-8	6	100	42	33	30	3220	156-LS-A-7	6	145	63	41	50	3468	6A11LZ	12	90	70	49.50	3579	613RHN	2101	6	20	52	29.00																	
2896	156L-A	6	60	38	00	3107	156L-A-1	6	150	80	42	70	3221	X-176-LS-A	6	165	70	44	00	3469	6B7KR	12	60	60	39	00	3580	613RHN	2102	6	20	52	29.00																
2897	156L-A-7	6	60	38	00	3108	156L-A-4	6	150	80	42	70	3222	W-712-LS-A	6	165	70	44	00	3470	6B7KV	12	60	60	39	00	3581	613RHN	2103	6	20	52	29.00																
2898	156L-A-9	6	60	38	00	3109	156L-G-1	6	150	80	42	70	3223	712-LS-A	12	55	64	39	00	3471	6B7KW	12	60	60	39	00	3582	613RHN	2104	6	20	52	29.00																
2899	156L-A-11	6	60	38	00	3110	156L-G-2	6	150	80	42	70	3224	712-LS-A-5	12	55	64	39	00	3472	6B7KZ	12	60	60	39	00	3583	613RHN	2105	6	20	52	29.00																
2900	156L-A-10	6	60	38	00	3111	912L-G-A-1	6 &	12	70	98	52.70	3225	712-LS-A-6	12	55	64	39	00	3473	6B7L	12	60	60	40	00	3584	613RHN	2106	6	20	52	29.00																
3001	156L-A-12	6	60	38	00	3112	330A-A-1	12	30	15	100	.....	3226	712-LS-A-7	12	55	64	39	00	3474	6B7LV	12	60	60	40	00	3585	613RHN	2107	6	20	52	29.00																
3002	56L-D	6	60	56	38	00	3113	5248TD-H-2	14	15	68	.....	3227	712-LS-A-8	12	55	64	39	00	3475	6B7LY	12	60	60	40	00	3586	613RHN	2108	6	20	52	29.00																
3003	96L-A	6	130	70	46	40	3114	7188TH-4	18	40	96	.....	3228	712-LS-A-11	12	55	64	39	00	3476	6B7LYZ	12	60	60	40	00	3587	613RHN	2109	6	20	52	29.00																
3004	96L-A-4	6	130	70	46	40	3115	724LTA-1	12 &	24	25	96	83	90	3229	X-912-LS-A	12	80	77	54	50	3477	6B7MR	12	80	72	54	50	3588	613RHN	2111	6	20	52	29.00														
3005	96L-A-1	6	130	70	46	40	3116	156L-A-2	6	95	58	38	00	.....	3230	912-LS-A-1	6	120	80	77	54	50	3478	6C1LYR	12	80	72	54	50	3589	613RHN	2112	6	20	52	29.00													
3006	96L-D	6	130	70	46	40	3117	136L-A-3	6	77	50	29	00	.....	3231	924-LS-A-1	24	80	150	113	50	3479	6C1LYV	12	80	72	54	50	3590	613RHN	2113	6	20	52	29.00														
3007	236L-D	6	165	84	50	3118	X-116-LMD	6	70	48	.....	3232	X-112-LS-A	12	100	90	63	70	3481	6C1LYZ	12	80	72	54	50	3591	613RHN	2114	6	20	52	29.00																	
3008	112L-A-3	12	18	48	35	70	3119	V-116-LHA	6	148	77	.....	3233	112-LS-A-1	12	100	90	63	70	3482	6C15PYR	12	112	88	66	50	3592	613RHN	2115	6	20	52	29.00																
3009	712L-A-4	12	30	58	34	00	3120	76-LSI-A-1	6	67	39	.....	3234	112-LS-A-2	12	100	90	63	70	3483	8A9PR	16	72	87	55	00	3593	613RHN	2116	6	20	52	29.00																
3010	712L-A-16	12	30	58	34	00	3121	76-LSI-A-1	6	66	24	.....	3235	112-LS-A-3	12	100	90	63	70	3484	8A9PYR	16	72	87	55	00	3594	613RHN	2117	6	20	52	29.00																
3011	712L-A-1	6 &	12	30	58	34	00	3122	116-L-A-1	6	60	44	24	00	.....	3236	X-912-LS-E	12	80	77	54	50	3485	9A7RR	18	54	85	58	00	3595	613RHN	2118	6	20	52	29.00													
3012	712L-A-15	6 &	12	30	58	34	00	3123	X-96LMA	6	50	39	.....	3237	912-LS-E-1	12	80	77	54	50	3486	9C1GR	18	54	85	58	00	3596	613RHN	2119	6	20	52	29.00															
3013	712L-A-9	6 &	12	30	58	34	00	3124	76 SH	6	60	30	.....	3238	912-LS-E-5	6	120	80	77	54	50	3487	12A7TR	24	54	95	87	50	3597	613RHN	2120	6	20	52	29.00														
3014	112L-A-2	12	44	70	51	50	3125	96LMA-A-12	6	70	48	24	00	.....	3239	912-LS-E-6	6	120	80	77	54	50	3488	12A7TYV	24	54	95	87	50	3598	613RHN	2121	6	20	52	29.00													
3016	112L-A-4	12	44	70	51	50	3127	136L-H-A-1	6	77	50	29	00	.....	3240	116-LS-J-2	6	100	47	29	00	3489	3B5A	6	25	14	00	3600	613RHN	2124	6	20	52	29.00															
3017	112L-A-4	12	44	70	51	50	3128	W-116-LMA	6	77	50	29	00	.....	3241	116-LS-J-1	6	100	47	29	00	3490	Spec	6	25	14	00	3601	613RHN	2125	6	20	52	29.00															
3018	1312L-A-1	6 &	12	77	95	71	50	3129	116STN-A-1	6	70	45	28	50	.....	3242	X-116-LT-A	6	80	39	24	00	.....	.....	.....	.....	.....	3602	613RHN	2126	6	20	52	29.00															
3019	1312L-E	12	95	112	80	50	3130	76-SPN	6	39	23	.....	3243	116-LT-A	6	80	39	24	00	.....	.....	.....	.....	.....	3603	613RHN-2	2150	6	20	52	29.00																		
3020	16L-A-1	16	30	75	60	00	3131	196-L-A-2	6	130	70	46	40	.....	3244	116-LT-A-2	6	80	39	24	00	.....	.....	.....	.....	3604	613RHN-2	2151	6	20	52	29.00																	
3021	16L-A-4	16	30	75	60	00	3132	X-176-LGCR-D	6	120	75	.....	3245	116-LT-A-3	6	80	39	24	00	.....	.....	.....	.....	3605	613RHN-2	2152	6	20	52	29.00																			
3022	216L-A-1	16	44	90	60	70	3133	176-LGCR-D-1	6	120	75	.....	3246	724-LT-M-1	24	40	100	83	90	.....	.....	.....	.....	3606	613RHN-2	2153	6	20	52	29.00																			
3023	118L-A-1	16	60	105	75	30	3134	116-L-A-3	6	70	44	24	00	.....	3247	112-SH-1	6	120	80	75	.....	.....	.....	.....	3607	613RHN-2	2154	6	20	52	29.00																		
3024	524L-A-1	24	18	90	70	20	3135	136-L-A-1	6	87	50	30	00	.....	3248	712-SH-2	12	60	60	60	.....	.....	.....	.....	3608	613RHN-2	2155	6	20	52	29.00																		
3025	74L-H-1	24	30	105	83	90	3136	712-LH-A-4	12	40	58	34	00	.....	3249	X-136-USA	6	120	95	60	00	.....	.....	.....	3609	613RHN-2	2156	6	20	52	29.00																		
3026	116L-A	6	60	44	24	00	3137	132-LH-A-1	12	100	95	71	50	.....	3250	116-LM-D-5	6	90	44	24	00	.....	.....	.....	.....	3610	613RHN-2	2157	6	20	52	29.00																	
3027	116L-A-2	6	60	44	24	00	3138	136-LH-D-2	6	100	50	29	00	.....	3251	136-L-A-11	6	120	55	34	00	.....	.....	.....	.....	3611	613RHN-7	2171	6	20	52	29.00																	
3028	116L-H	6	60	44	24	00	3139	136-LH-D-5	6	100	50	29	00	.....	3252	116-LS-A-5	6	120	55	34	00	.....	.....	.....	.....	3612	615RHN	2180	6	20	52	29.00																	
3029	116L-H	6	60	44	24	00	3140	712-LH-D-1	12	40	58	34	00	.....	3253	116-LS-A-5																																	



Serial No.	PREST-O-LITE Type and Replacement No.				Volts	Amperes Hrs. at 5 Hour Rate	Weight	Price	Serial No.	PREST-O-LITE Type and Replacement No.				Volts	Amperes Hrs. at 5 Hour Rate	Weight	Price	Serial No.	COLUMBIA BATTERY June 20th 1922 Federal Tax not included Type F. O. B. Indianapolis Ind				Volts	Amperes Hrs. at 5 Hour Rate	Weight	Price	Serial No.	COLUMBIA BATTERY June 20th 1922 Federal Tax not included Type F. O. B. Indianapolis Ind				Volts	Amperes Hrs. at 5 Hour Rate	Weight	Price	Serial No.	WESTINGHOUSE UNION Includes Federal Excise Tax Type and Part No. August 1st, 1922				Volts	Amperes Hrs. at 5 Hour Rate	Weight	Price																																																																																																																																																																																																																																																																																																																																																																																																																																															
	June 19, 1922	June 19, 1922	June 19, 1922	June 19, 1922						June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922						June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922						June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922						June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922					June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922	June 20th 1922



MARKO BATTERY Excess Tax not included July 15th 1922 Type										MARKO BATTERY Excess Tax not included July 15th 1922 Type										CINCINNATI BATTERY Tax Included January 1, 1922 Type and Form										HESSLER BATTERY Federal Tax Included Dec. 10th, 1921 Type & Assembly										HESSLER BATTERY Federal Tax Included Dec. 10th, 1921 Type & Assembly									
Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price	Serial No.	Volts	Amperes Hrs. at 5 Hour Rate	Net Wgt., Lbs.	Price															
4776	6	100	35	27 00	4889	24	35	98	88 00	5040	6	105.5	59	35 00	5218	AS-37-119	6	100	33	44	5332	GE-37-103	6	100	33	44	5333	GE-37-109	6	100	33	44																	
4777	6	100	35	27 00	4890	30	35	123	123 00	5041	6	105.5	59	35 00	5219	AS-37-130	6	100	33	44	5334	GE-39-P102	6	100	33	44	5335	GE-39-103	6	100	33	44																	
4778	6	100	35	27 00	4891	100	35	135	135 00	5042	6	105.5	59	35 00	5220	AS-37-135	6	100	33	44	5336	GE-39-P103	6	100	33	44	5337	GE-39-109	6	100	33	44																	
4779	6	100	35	27 00	4892	135	35	139	139 00	5043	6	105.5	59	35 00	5221	AS-39-101	6	100	33	44	5338	GE-39-110	6	100	33	44	5339	GE-63-161	12	35	40	68																	
4780	6	100	35	27 00	4893	6SX	150	35	150 00	5044	6	105.5	59	35 00	5222	AS-39-114	6	100	33	44	5340	GE-63-163	12	35	40	68	5341	GE-64-162	12	50	47	84																	
4781	6	100	35	27 00	4894	12S5	20	35	51 00	5045	6	105.5	59	35 00	5223	AS-63-137	12	35	40	68	5342	GE-66-153	12	70	54	53	5343	GE-67-147	12	85	61	07																	
4782	6	115	62	35 80	4895	12S5H	12	30	54 00	5046	6	105.5	59	35 00	5224	AS-63-148	12	35	40	68	5344	GE-67-147	12	85	61	07	5345	GE-67-147	12	85	61	07																	
4783	6	80	49	27 00	4896	12SH11	12	80	94 00	5047	6	105.5	59	35 00	5225	AS-64-102	12	50	47	84	5346	GE-67-147	12	85	61	07	5347	GE-67-147	12	85	61	07																	
4784	6	80	49	27 00	4897	12SH13	12	100	110 00	5048	6	105.5	59	35 00	5226	AS-64-137	12	50	47	84	5348	GE-67-147	12	85	61	07	5349	GE-67-147	12	85	61	07																	
4785	6	100	57	32 50	4898	12H13	12	100	111 00	5049	6	105.5	59	35 00	5227	AS-65-142	12	70	54	53	5350	GE-67-147	12	85	61	07	5351	GE-67-147	12	85	61	07																	
4786	6	100	57	32 50	4899	12HC11	12	90	106 00	5050	6	105.5	59	35 00	5228	AS-65-142	12	70	54	53	5352	GE-67-147	12	85	61	07	5353	GE-67-147	12	85	61	07																	
4787	6	100	57	32 50	4900	18B9	18	50	107 00	5051	6	105.5	59	35 00	5229	AS-66-142	12	85	61	07	5354	GE-67-147	12	85	61	07	5355	GE-67-147	12	85	61	07																	
4788	6	115	65	37 50	4901	24H7	24	55	145 00	5052	6	105.5	59	35 00	5230	AS-66-152	12	100	64	35	5356	GE-67-147	12	85	61	07	5357	GE-67-147	12	85	61	07																	
4789	6	115	65	37 50	4902	24B7	24	55	145 00	5053	6	105.5	59	35 00	5231	AS-67-143	12	100	64	35	5358	GE-67-147	12	85	61	07	5359	GE-67-147	12	85	61	07																	
4790	6	80	50	27 50						5054	6	105.5	59	35 00	5232	AS-83-185	16	35	60	75	5360	GE-67-147	12	85	61	07	5361	GE-67-147	12	85	61	07																	
4791	6	135	69	40 00						5055	6	157.5	76	44 50	5233	AS-83-186	16	35	60	75	5362	GE-67-147	12	85	61	07	5363	GE-67-147	12	85	61	07																	
4792	6	70	43							5056	6	180	76	44 50	5234	AS-84-165	16	35	60	75	5364	GE-67-147	12	85	61	07	5365	GE-67-147	12	85	61	07																	
4793	6	90	50	28 00						5057	6	180	76	44 50	5235	AS-85-185	16	35	60	75	5366	GE-67-147	12	85	61	07	5367	GE-67-147	12	85	61	07																	
4794	6	90	50	28 00						5058	6	180	76	44 50	5236	AS-122-176	24	20	74	75	5368	GE-67-147	12	85	61	07	5369	GE-67-147	12	85	61	07																	
4795	6	90	50	28 00						5059	6	180	76	44 50	5237	AS-152-180	30	20			5370	GE-67-147	12	85	61	07	5371	GE-67-147	12	85	61	07																	
4796	6	110	58	33 00						5060	6	180	76	44 50	5238	ASM-36-101	6	85	29	52	5372	GE-67-147	12	85	61	07	5373	GE-67-147	12	85	61	07																	
4797	6	110	58	33 00						5061	6	180	76	44 50	5239	ASM-36-113	6	85	29	52	5374	GE-67-147	12	85	61	07	5375	GE-67-147	12	85	61	07																	
4798	6	110	58	33 00						5062	12	42	68	40 00	5240	ASM-63-142	12	35	39	69	5376	GE-67-147	12	85	61	07	5377	GE-67-147	12	85	61	07																	
4799	6	110	58	33 00						5063	12	42	68	40 00	5241	ASM-63-145A	12	35	39	69	5378	GE-67-147	12	85	61	07	5379	GE-67-147	12	85	61	07																	
4800	6	130	66	38 00	4950	6-A-7-69	6	42	34	22 50	5064	12	42	68	40 00	5242	ASM-63-164	12	35	39	69	5380	GE-67-147	12	85	61	07	5381	GE-67-147	12	85	61	07																
4801	6	130	66	38 00	4951	6-A-9	6	42	34	22 50	5065	12	42	68	40 00	5243	ASP-39-117	6	130	44	37	5382	GE-67-147	12	85	61	07	5383	GE-67-147	12	85	61	07																
4802	6	150	72		4952	6-A-11	6	50	50	30 00	5066	12	42	68	40 00	5244	BE-35-101	6	81	29	52	5384	GE-67-147	12	85	61	07	5385	GE-67-147	12	85	61	07																
4803	6	90	51	29 00	4953	6-A-11-1	6	50	50	30 00	5067	12	42	68	40 00	5245	BE-35-103	6	81	29	52	5386	GE-67-147	12	85	61	07	5387	GE-67-147	12	85	61	07																
4804	6	90	51	29 00	4954	6-A-11-2	6	50	50	30 00	5068	12	42	68	40 00	5246	BE-35-111	6	81	29	52	5388	GE-67-147	12	85	61	07	5389	GE-67-147	12	85	61	07																
4805	6	110	59	34 00	4955	6-A-11-4	6	50	50	30 00	5069	12	42	68	40 00	5247	BE-36-P102	6	99	33	34	5390	GE-67-147	12	85	61	07	5391	GE-67-147	12	85	61	07																
4806	6	110	59	34 00	4956	6-A-11-5	6	50	50	30 00	5070	12	42	68	40 00	5248	BE-36-103	6	99	33	34	5392	GE-67-147	12	85	61	07	5393	GE-67-147	12	85	61	07																
4807	6	110	59	34 00	4957	6-A-11-8	6	50	50	30 00	5071	12	42	68	40 00	5249	BE-36-104	6	99	33	34	5394	GE-67-147	12	85	61	07	5395	GE-67-147	12	85	61	07																
4808	6	130	67	38 00	4958	6-A-11-10	6	50	50	30 00	5072	12	42	68	40 00	5250	BE-36-108	6																															



BEAR-CAT BATTERY Federal Excise Tax Not Included July 1st 1922 Type and Form										BE R-CAT BATTERY Federal Excise Tax Not Included July 1st 1922 Type and Form										COLE BATTERY January 15, 1922 Type and Battery No.										UTILITY BATTERY January 1, 1921 Battery No. Type										RAY BATTERY All Prices F.O.B. Ypsilanti Mich. 5% War Tax Dec., 1921 Type & Part No.									
Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price	Serial No.	Volts	Amperes Hrs. at 5 Hrs. Rate	Weight	Price															
5562 A-611-A-96	6		25 00	5675 A-129-D-90	12		53 50	3839 YE-619-325	6		39 10	6111 N-51	ST-317-A	6	57 00	6241 RL-611-564	6	90	29 00																														
5563 A-611-D-8	6		26 50	5676 A-129-D-97	12		53 50	3870 LS-611-261	6		23 80	6112 N-59	ST-317-CWR	6	57 00	6242 RF-613-600	6	120	33 00																														
5564 A-611-D-50	6		26 50	5677 A-1211-A-9	12		60 00	3871 LS-611-262	6		23 80	6113 N-61	ST-319-A	6	62 00	6243 RF-613-601	6	120	33 00																														
5565 A-611-D-53	6		26 50	5678 A-1211-A-32	12		60 00	3872 LE-611-324	6		27 40	6114 N-62	ST-319-AW	6	62 00	6244 RF-613-602	6	120	33 00																														
5566 A-611-D-54	6		26 50	5679 A-1211-D-14	12		60 50	3873 LS-613-263	6		27 40	6115 N-64	ST-319-B	6	62 00	6245 RF-612-603	6	120	33 00																														
5567 A-611-D-58	6		25 50	5680 A-1211-D-72	12		60 50	3874 LS-613-264	6		27 40	6116 N-71	ST-321-A	6	67 00	6246 RF-613-604	6	120	33 00																														
5568 A-611-T-4	6		27 00	5681 C-127-A-33	12		40 00	3875 LS-613-265	6		27 40	6117 N-74	ST-321-B	6	67 00	6247 RF-613-605	6	120	33 00																														
5569 A-611-T-5	6		27 00	5682 C-127-D-91	12		41 00	3876 LS-613-267	6		27 40	6118 N-121	SON-311-A	6	62 50	6248 RF-613-606	6	120	33 00																														
5570 A-613-A	6		30 00	5683 C-129-A-33	12		50 50	3877 LE-613-268	6		28 00	6119 N-128	SON-311-CW	6	42 50	6249 RF-613-607	6	120	33 00																														
5571 A-613-A-1	6		30 00	5684 C-129-B-93	12		51 00	3878 LE-613-271	6		28 00	6120 N-131	SON-313-A	6	47 50	6250 RF-613-608	6	120	33 00																														
5572 A-613-A-2	6		30 00	5685 C-129-B-93	12		51 00	3879 LS-613-272	6		28 00	6121 N-134	SON-313-B	6	47 50	6251 RF-613-609	6	120	33 00																														
5573 A-613-A-3	6		30 00	5686 C-129-D-73	12		54 00	3880 LS-615-273	6		33 00	6122 N-141	SON-315-A	6	52 00	6252 RF-613-610	6	120	33 00																														
5574 A-613-A-22	6		30 00	5687 C-1211-A	12		59 00	3881 LS-615-274	6		33 00	6123 N-144	SON-315-B	6	52 00	6253 RF-613-611	6	120	33 00																														
5575 A-613-A-24	6		31 00	5688 C-1213-A-78	12		66 00	3882 LS-615-275	6		33 00	6124 N-151	SON-317-A	6	57 00	6254 RF-613-612	6	120	33 00																														
5576 A-613-A-34	6		30 00	5689 C-1215-D-74	12		75 00	3883 LS-615-277	6		33 00	6125 N-154	SON-317-B	6	57 00	6255 RF-613-613	6	120	33 00																														
5577 A-613-A-38	6		30 00	5690 B-167-A-21	16		56 50	3884 LS-619-278	6		36 80	6126 N-161	SON-319-A	6	62 00	6256 RF-613-614	6	120	33 00																														
5578 A-613-A-39	6		30 00	5691 B-167-A-75	16		56 50	3885 LS-619-279	6		36 80	6127 N-164	SON-319-B	6	62 00	6257 RF-613-615	6	120	33 00																														
5579 A-613-A-41	6		30 00	5692 B-169-A-75	16		68 50	3886 LS-619-280	6		36 80	6128 N-221	UN-311-A	6	48 50	6258 RF-613-616	6	120	33 00																														
5580 A-613-A-46	6		30 00	5693 B-1611-A	16		77 00	3887 LS-619-281	6		36 80	6129 N-227	UN-311-C	6	48 50	6259 RF-613-617	6	120	33 00																														
5581 A-613-A-47	6		30 00	5694 C-189-D-100	18		75 00	3888 HS-619-321	6		36 80	6130 N-241	UN-315-A	6	56 50	6260 RF-613-618	6	120	33 00																														
5582 A-613-A-48	6		30 00	5695 C-187-D-76	18		61 50	3889 HS-611-202	6		25 00	6131 N-247	UN-315-C	6	56 50	6261 RF-613-619	6	120	33 00																														
5583 A-613-A-49	6		30 00	5696 C-1811-D-77	18		86 50	3890 HS-611-201	6		28 00	6132 N-321	ST-67-A	6	56 50	6262 RF-613-620	6	120	33 00																														
5584 A-613-A-51	6		30 00	5697 B-247-A-18	24		80 20	3891 HS-613-203	6		28 00	6133 N-324	ST-67-AG	6	56 50	6263 RF-613-621	6	120	33 00																														
5585 A-613-A-52	6		30 00	5698 C-247-A-102	24		81 50	3892 HS-613-204	6		28 00	6134 N-325	ST-67-AR	6	56 50	6264 RF-613-622	6	120	33 00																														
5586 A-613-A-55	6		30 00	5699 C-247-DA	24		81 50	3893 HS-613-316	6		28 00	6135 N-326	ST-67-AR2R	6	56 50	6265 RF-613-623	6	120	33 00																														
5587 A-613-A-56	6		30 00	5700 A-249-A	24		98 00	3894 HE-613-205	6		28 00	6136 N-328	ST-67-AT	6	56 50	6266 RF-613-624	6	120	33 00																														
5588 A-613-A-60	6		30 00	5701 A-247-A	24		85 00	3895 HE-613-206	6		28 00	6137 N-329	ST-67-A2	6	56 50	6267 RF-613-625	6	120	33 00																														
5589 A-613-A-62	6		30 00	5702 A-2407-A	24		89 60	3896 HS-615-207	6		31 20	6138 N-341	ST-69-A	6	65 50	6268 RF-613-626	6	120	33 00																														
5590 A-613-A-63	6		30 00	5703 A-2409-A	24		89 70	3897 HS-615-208	6		34 20	6139 N-344	ST-69-AG	6	65 50	6269 RF-613-627	6	120	33 00																														
5591 A-613-A-84	6		30 00	5704 A-127-B-36	12		31 50	3898 HI-615-311	6		34 20	6140 N-347	ST-69-AS	6	65 50	6270 RF-613-628	6	120	33 00																														
5592 A-613-D-94	6		30 00	5705 B-619-A-60	6		48 00	3899 IL-615-313	6		34 20	6141 N-351	ST-69-B	6	65 50	6271 RF-613-629	6	120	33 00																														
5593 A-613-D-7	6		31 50	5706 A-615-A-49	6		40 00	3900 HS-617-210	6		34 20	6142 N-352	ST-69-BG	6	65 50	6272 RF-613-630	6	120	33 00																														
5594 A-613-D-44	6		31 50	5707 A-611-A-41	6		25 00	3901 HS-619-209	6		34 20	6143 N-361	ST-611-A	6	65 50	6273 RF-613-631	6	120	33 00																														
5595 A-613-D-53	6		31 50	5708 S-611-A																																													



# New Engine Feature in Latest Franklin

The first showing of the latest six-cylinder Franklin, designated as Series 10, which is being made in all parts of the country, discloses the new engine about which many rumors have been current in automobile circles for some time.

From a performance standpoint, power is the feature which shows the most noteworthy development in the new Franklin. In hill climbing, this greater power represents a 20 per cent. increase in ability and in speed, a 10 per cent. increase, tests made by the company show, without, however, involving any change in the size of the engine but registering in fact, a worthwhile reduction in fuel consumption.

From a design standpoint, Series 10 Franklin introduces some entirely new ideas in air-cooling which are the embodiment of work started by Franklin engineers as far back as 1915, it is stated. The cooling apparatus functioning on the new engine and called the pressure system, is said to have undergone tests on over a score of cars, and aggregating 500,000 miles, before its adoption. It develops a current of cooling air which is fully two and one half-times as great as that of the former Franklin system.

The new cooling system takes the air in at the front of the engine and forces it over the cylinders. This is the direct opposite from the method formerly employed in which the air was drawn in by a fan set in the flywheel at the rear of the motor. A blower or fan of the Sirocco type is mounted at the forward end of the crankshaft and encased in an aluminum housing. The air forced in by the blower passes through a continuation of this aluminum housing, is carried over the upper ends of the cylinder jackets and down across the cooling fins which are set in the walls of the cylinders.

A change has been made in the cooling fins, the ends being bent at approximate right angles so that they form what practically amounts to a closed jacket about the cylinders through which the air is conducted. This does away with the use of the separate outer jacket as used in former models, affords greater cooling area and permits a reduction in the length of the fins themselves.

With the new pressure system of cooling, the air forced in by the blower is absolutely controlled by baffle plates placed in the aluminum passageway already referred to, and this makes it possible to direct the necessary amount of air to those points where the greatest amount of heat is developed.

To make possible the most efficient use of the steadily lowering quality of gasoline now offered the motoring public, the new Franklin engine is equipped with what Franklin engineers term a fuel transformer. This device is in the shape of a cylindrical aluminum casting with corrugated walls surrounded by a heater jacket through which the exhaust gas of the engine is passed. Raw gasoline on its way to the inlet manifold is led through the interior of this transformer and subjected to heat which turns it into vapor. The device is so designed that it is impossible for anything except vapor to pass through it to the inlet manifold. "Heavy ends" in the gas which were not broken up or vaporized in their first passage through the transformer are trapped and returned to the bottom of the transformer, to be subjected once more to passage over the heated corrugated walls. This operation is repeated as many times as is necessary to produce the vapor. The device affords the Franklin a high degree of efficiency in the use of the

lowest grades of gasoline, in addition to preventing raw gasoline from being drawn into the cylinders and passing from there into the crank case to cause dilution of the lubricating oil.

Certain factors contributing to smoothness and quietness of operation have been perfected, among which the use of Duralamin for connecting rods is an innovation. This new material, by cutting off 50 per cent. of the weight of corresponding steel parts, makes possible a considerable lightening of reciprocating parts, succeeding thereby in reducing vibration.

The double flywheel effect contributing further to the counteracting of vibration, results from the mounting of the Sirocco fan at the front end and the flywheel at the rear end of the crankshaft. The crankshaft itself, case-hardened by a process perfected last year by the Franklin Company, is made considerably shorter and of larger diameter than heretofore; it is also mounted on seven bearings.

The introduction of the unit power plant in the latest Franklin, by maintaining perfect alignment between engine, clutch, and transmission, prevents strains and consequent irregularities, the result being apparent in even engine performance and quiet operation of the transmission gears. The standard S. A. E. shift has also been employed in the gear box and an adjustment has been put on the clutch pedal. By means of a Yale lock on the transmission, it is now possible to lock open cars either in neutral or in reverse position. Door locks are used to secure the enclosed cars.

Quiet operation of the two-unit lighting and starting system, North East equipment, is coupled also with quiet starter engagement secured by the Bendix drive operating on a steel gear on the flywheel. In the past Franklin has employed a single unit electrical system.

A novel arrangement introduced in the latest Franklin is an air cleaner by which dust is removed from all the air that enters the carburetor. This device is of a self-acting centrifugal type employing the same principle as a cream separator. Air is drawn in through the top and a whirling action of the vanes inside, set up by suction, throws all dirt particles out through a separate passage.

Cold weather starting, according to Franklin experiments, can be readily effected with the new engine at temperatures as low as low as twenty degrees below zero. For this purpose Franklin employs the same type of electric vaporizer as heretofore, but with several refinements. The control of carburetor adjustments has been greatly simplified, as pressure of a magnetic button operates both the choke and vaporizer, and a T-handle regulates the needle valve.

Chassis lubrication of the latest Franklin is by the Bowen-Empress system by means of which either oil or grease as required is forced into the connection under high pressure. There are only five grease connections on the entire car, including universal joints, and oil used for lubricating purposes at other points. Manipulation of the plunger in the oil gun builds up the desired amount of pressure and when the nipple of the gun is attached to the point to be oiled, the pressure is automatically released, resulting in flow of lubricant which flushes all old oil or grease and grit out of the bearings and replacing it with a fresh clean supply.

Improvements have been made which have in-



creased the effectiveness of the service brake 22 per cent. and that of the emergency brake 18 per cent.

Demountable rims which answer the company's requirements for light unsprung weight, have been made standard equipment on Series 10 in the form of the Rubsam wheel with the hollow steel felloe. This installation, according to Franklin engineers, leaves easy riding qualities unaffected. It is also claimed that the demountable rim feature is the most convenient yet devised.

From the standpoint of night driving, the Mirro-Tilt lights on the Franklin are interesting. Pressure on a button on the toe-board makes it possible for the rays to be projected a considerable distance ahead of normal position, so that the roadway is given ample illumination, especially under conditions of fast travel. Upon approach of a car from the opposite direction, release of the button restores the rays to normal.

An item of convenience is the gearing of the tire pump to an idler in the transmission, engagement of which can be made by turning the shifter shaft by means of a screw driver. The tube is constantly attached to the pump and is coiled under the left front seat.

Riding qualities come in for improvement through the attachment of stabilators as recommended equipment. It is claimed for the device that recoil action and sidesway of the springs is controlled, while their soft action is preserved. Suppleness of the springs themselves is obtained through employment of the full-elliptic type as heretofore.

The latest Franklin is furnished in eight body types: touring, runabout, demi-sedan, demi-coupe, sedan, brougham, coupe and touring-limousine.

#### Earl Announces New Closed Model

A new closed car, to be known as the Earl cabriolet, is now offered by Earl Motors, Inc., Jackson, Mich. While this new car is patterned after the brougham, and retains practically all of its refinements and comforts, its cost, owing to quantity production and careful planning, is materially reduced. The cabriolet will list at \$1,395, f. o. b. Jackson.

The cabriolet is essentially an all-weather car. In summer the plate glass rear quarter windows can be lowered, and the door windows manipulated instantly. The windshield is of the standard Earl one-piece construction, and swings either in or out, thereby affording ample ventilation. The especially designed rain and sun visor, which is standard equipment, gives the much-needed protection from rain and sun.

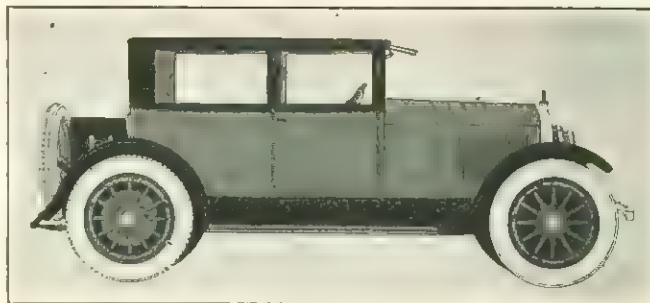
The upholstery is of genuine Spanish leather, in a rich grey tone, and the interior finish is of the same material. Other standard equipment includes dome light, windshield wiper, and complete set of tools.

The top and sides of the rear tonneau are covered with black duratex fabric, which is weather-proof, easily cleaned and very smart appearing in contrast with the painted body panels. The body color is a special Earl blue, which gives the cabriolet an air of distinction. The fenders and chassis are glossy black enameled.

At the rear is a platform for a trunk, protected with maple slats in natural finish. The rear body panel is also protected by nicked slat irons; and at slight extra cost, a trunk is furnished. The Earl trunk contains two large suitcases and a hat box—a great convenience for weekend trips. Besides the trunk, special equipment includes Boyce motometer, and front bumper, these three items being furnished at a net cost of \$50.

Riding comfort, of course, is one of the first considerations in a car of this type, and is provided for by ample body dimensions and a low center of gravity. The extra long 56-inch rear springs, too, and the rigid frame, with 7-inch side channels, and five cross members, form a foundation for the comfort of the deep seat cushions with their high grade spiral springs.

The car is one inch less than fourteen feet in length overall; and, while the height is only 6 feet 2 inches,



EARL CABRIOLET

the head room inside is ample, being 37 inches from seat cushion to top lining. There is also ample leg room in the front tonneau, 53 inches being the inside length.

For convenience in entering, the front seats tilt forward, and the backs fold down. This arrangement with the front seats facing forward gives a roominess that is not possible in the average four-passenger coupe with the driver's seat set forward and the small swinging seat at the right, facing the rear. The front seats, themselves, are 18 inches wide, 18 inches deep and 12 inches from the floor, with a comfortable 3-inch pitch. The rear seat, which is 45½ inches wide, will seat three persons without crowding. This cushion is 18 inches deep, 14 inches from the floor, with a pitch of 4 inches.

#### Special Six Phaeton New Columbia Model

A new Columbia model, known as the special six phaeton, to retail at \$1,095, f. o. b. Detroit, has been added to the Columbia line. This body is mounted on the standard Continental 115 in. wheel-base chassis incorporating the Continental 6-Y engine, Timken axle, Durston transmission gearset with Timken bearings, Stromberg carburetor, Borg & Beck clutch, Gemmer steering gear, Spicer universal and Auto-Lite electrical equipment.

Among the features of the special six are nickel-plated Harrison radiator with thermostatically controlled shutters, cowl ventilator, barrel head lamp as well as cowl lamps for parking, heavy weight crown fenders and cord tires. The body is of generous proportions, the rear seat being 46 in. wide and the upholstery is of real leather over deep coiled springs.

#### Tommy Milton Wins at Kansas City; Roscoe Sarles Killed

Tommy Milton, champion driver of the American Automobile Association and winner of the 1921 Indianapolis speed classis, driving an eight-cylinder Leach special, won the 300-mile automobile race held at Kansas City's new \$500,000 speedway Sunday, September 17.

Roscoe Sarles, relief driver for Cliff Durant, was burned to death when his car caught fire after smashing through the railing of the track. The car hurdled 40 feet and smashed to the ground. His mechanic, C. V. Pickup, was injured dangerously.



## Association Items

### CALENDAR

- POMONA, CAL.—Automobile and Automotive Accessory Show, auspices of the Citrus Belt Auto Trade Assn., Los Angeles County Fair Grounds, at Pomona; James E. Granger, manager; Oct. 17-21.
- CHICAGO, ILL.—Convention, National Farm Equipment Manufacturers; Oct. 18-20.
- WASHINGTON, D. C.—Annual Closed Car Salon, auspices of the Washington Automotive Trade, Convention Hall; Oct. 21-28.
- CLEVELAND, OHIO—Society of Automotive Engineers, meeting of Springs Division, Standards Committee; Oct. 24.
- CLEVELAND, OHIO—Society of Automotive Engineers, joint meeting of Chain Division, Standards Committee, with Power Transmission Chain Committee of American Society of Mechanical Engineers; Oct. 25.
- NEW YORK, N. Y.—Society of Automotive Engineers, meeting of Iron and Steel Division, Standards Committee; Oct. 26.
- WASHINGTON, D. C.—Second National Conference for the Study of Highway Engineering and Highway Transport Education; Oct. 26-28.
- DETROIT, MICH.—Society of Automotive Engineers, meeting of Parts and Fittings Division, Standards Committee; Oct. 30.
- DOTHAN, ALA.—Automobile Show, to be held in connection with the South East Alabama Fair, auspices of the Dothan Automobile Dealers' Assn., Fair Grounds Automobile building; Fay Waldin, manager; Oct. 30-Nov. 4.
- DETROIT, MICH.—Society of Automotive Engineers, meeting of Transmission Division, Standards Committee; Oct. 31.
- DETROIT, MICH.—Society of Automotive Engineers, meeting of Passenger Car Division, Standards Committee; Nov. 1.
- DETROIT, MICH.—Society of Automotive Engineers, meeting of Passenger Car Body Division, Standards Committee; Nov. 2.
- DETROIT, MICH.—Society of Automotive Engineers, meeting of Electric Vehicle Division, Standards Committee; Nov. 3.
- LONDON, ENGLAND—Olympia Automobile Show; Nov. 3-11.
- CHICAGO, ILL.—Society of Automotive Engineers, meeting of Engine Division, Standards Committee; Nov. 6.
- CHICAGO, ILL.—Society of Automotive Engineers, joint meeting of Agricultural power and Stationary Engine Division, Standards Committee; Nov. 7.
- HOUSTON, TEX.—South Texas Fair; Nov. 8-18.
- JERSEY CITY, N. J.—Third Annual Show, auspices of the Hudson County Automobile Trade Assn., Fourth Regiment armory; Nov. 11-18.
- LOS ANGELES, CAL.—Automotive and Accessories Show, auspices of the Motor Car Dealers' Assn. of Los Angeles, Praeger Park, Washington and Grand avenues; Burt Roberts, manager; Nov. 11-19.
- CHICAGO, ILL.—Annual Meeting and Show of the Automotive Equipment Assn., Annex to the Coliseum; Nov. 13-18.
- CINCINNATI, OHIO—Second Annual Automobile Accessory and Radio Exposition, auspices of the National Automobile Chamber of Commerce; Nov. 22-29.
- PASADENA, CAL.—Automobile Show, auspices of the Motor Car Dealers' Assn., E. C. Lindley, secretary; December.
- NEW YORK, N. Y.—Eighteenth Annual Automobile Salon, Commodore Hotel; Dec. 3-9.
- TOLEDO, OHIO—Annual Convention of the Ohio Automotive Trades Assn.; Dec. 6-8.
- PHILADELPHIA, PA.—Passenger Car Show, auspices of the Philadelphia Automobile Trade Assn., Commercial Museum, Louis C. Block, manager; January.
- NEW YORK, N. Y.—National Automobile Show, auspices of the National Automobile Chamber of Commerce, Grand Central Palace; Jan. 6-13.
- NEW YORK, N. Y.—Second National Automobile Body Builders' Show, auspices of the Automobile Body Builders' Assn., 12th Regiment Armory; Jan. 8-13.
- CLEVELAND, OHIO—Annual Winter Show, auspices of the Cleveland Automobile Manufacturers' and Dealers' Assn.; Jan. 20-27.
- CHICAGO, ILL.—National Automobile Show, auspices of the National Automobile Chamber of Commerce, Coliseum; Jan. 27-Feb. 3.
- CHICAGO, ILL.—Annual Automobile Salon, auspices of the National Automobile Chamber of Commerce, Drake Hotel; Jan. 27-Feb. 3.
- HARTFORD, CONN.—Automobile Show, auspices of the Hartford Automobile Dealers' Assn., State Armory, Arthur Fifott, manager; February.
- MINNEAPOLIS, MINN.—Annual Automobile Show, auspices of the Minneapolis Automobile Trade Assn., W. R. Wilmot, manager; Feb. 3-10.
- NEW YORK, N. Y.—Annual Automobile Show, auspices of the Brooklyn Motor Vehicle Dealers' Assn., 23rd Regiment armory; Feb. 24-Mar. 3.
- SYRACUSE, N. Y.—Annual Automobile Show, auspices of the Syracuse Automobile Dealers' Assn.; Feb. 26-Mar. 3.
- NEWARK, N. J.—Annual Automobile Show, auspices of the Newark Auto Trade Assn., Claude E. Holgate, manager; Mar. 10-17.
- BOSTON, MASS.—Passenger Car, Truck and Accessory Show, auspices of the Boston Automobile Dealers' Assn., Mechanics Building, Chester I. Campbell, manager; Mar. 10-17.

### Los Angeles to Hold Show

The Motor Car Dealers' Association of Los Angeles will hold a show November 11 to 19. This will be the first show in this city for two years. Announcement of the location has not been made, owing to the difficulty in obtaining a building of sufficient size. The new Shrine Temple may be sufficiently near completion by that time to accommodate the show. Otherwise it is probable tents will have to be used.

### New York Association Moves

The rooms and offices of the Automobile Merchants' Association, New York City, have been moved from 1845 Broadway to the Hotel Embassy, 2030 Broadway, at Seventieth Street.

### Olds Will Build Four-Cylinder Brougham

A new addition to the 1923 Oldsmobile line was revealed recently when the Olds Motor Works announced that production had been started on a brougham for its four-cylinder chassis. The new car, which will be one of the leading lines of this factory for the next year, will sell at \$1,425.

Mack Trucks, Inc., has opened a factory branch at Toledo, which will be in charge of J. C. Smith, formerly manager of the St. Louis branch.



# Brake Lining Sizes for Cars and Trucks

## From 1915 to 1921

NOTICE.—In column "No. of Pieces" where one number only is given it means that there are that number of pieces in each brake—where two figures are given it means that the first number applies to the Internal and the second to the External.

CAR	BRAKE LINING						CAR	BRAKE LINING						CAR	BRAKE LINING						CAR	BRAKE LINING									
	Year	Model	Internal			No. of Pieces		Year	Model	Internal			No. of Pieces		Year	Model	Internal			No. of Pieces		Year	Model	Internal			No. of Pieces				
			Width	Thickness	Length					Width	Thickness	Length					Width	Thickness	Length					Width	Thickness	Length		Width	Thickness	Length	
Abbott-Detroit.	1916	8-80	2 1/4	3/8	50	2	1	Autocar.	1916	UB	2 1/4	3/8	14	2	1	1918	Type 57	2 1/4	3/8	51	2	2	Commerce	1917	E	2 1/4	3/8	43	2	2	2
	1916	6-44	1 3/4	3/8	36	2	2		1917	XXI-F	2 1/4	3/8	52	2	2	1919	Type 57	2 1/4	3/8	51	2	2	Common-	1918	E	2 1/4	3/8	43	2	2	2
	1917	6-44	1 3/4	3/8	30	2	3		1919	XXI-F	2 1/4	3/8	52	2	3	1920	.....	2 1/4	3/8	50	2	3	wealth.	1919	.....	2 1/4	3/8	45	2	3	2
	1918	8-80	2 1/4	3/8	50	2	4		1921	XXI-F, G	2 1/4	3/8	53	2	4	1921	59	2 1/4	3/8	52	2	4	Concord.	1919	.....	2 1/4	3/8	45	2	4	2
	1918	644	1 3/4	3/8	36	2	5		1921	XXVI-B, Y	2 1/4	3/8	25 1/2	2	5	1916	1 ton B	1 3/4	3/8	30 1/2	1	5		1919	A	3 1/4	1 1/2	13 1/2	1	5	2
Acc.....	1921	All, 2 1/2	2 1/4	3/8	3 1/2	1	6							6		1916	1 ton F	1 3/4	3/8	30 1/2	1	6		1919	B	3 1/4	1 1/2	13 1/2	1	6	2
Acme.....	1918	1 ton	3 1/4	1 1/2	52	4	7	Avery Co.	1917	1 ton	2 1/4	3/8	17	3	7	1917	1 ton F	1 3/4	3/8	30 1/2	1	7		1918	B	3 1/4	1 1/2	13 1/2	1	7	2
	1918	2 tons	3 1/4	1 1/2	53	4	8		1917	2 tons	2 1/4	3/8	17	3	8	1918	1 ton F	1 3/4	3/8	30 1/2	1	8		1918	B	3 1/4	1 1/2	13 1/2	1	8	2
	1918	3 1/2 tons	3 1/4	1 1/2	52	4	9		1918	3 tons	2 1/4	3/8	17	3	9	1918	1 ton F	1 3/4	3/8	30 1/2	1	9		1918	B	3 1/4	1 1/2	13 1/2	1	9	2
All-Amer.	1921	B1-C1	2 1/4	3/8	44	2	10	Beck.....	1918	5 tons	1 3/4	3/8	17	3	10	1918	1 ton F	1 3/4	3/8	30 1/2	1	10		1918	B	3 1/4	1 1/2	13 1/2	1	10	2
Allen.....	1915	33	1 3/4	3/8	34 1/2	2	11		1918	5 tons	1 3/4	3/8	17	3	11	1918	1 ton F	1 3/4	3/8	30 1/2	1	11		1918	B	3 1/4	1 1/2	13 1/2	1	11	2
	1915	34	1 3/4	3/8	36	2	12		1918	5 tons	1 3/4	3/8	17	3	12	1918	1 ton F	1 3/4	3/8	30 1/2	1	12		1918	B	3 1/4	1 1/2	13 1/2	1	12	2
	1915	35	1 3/4	3/8	36	2	13		1918	5 tons	1 3/4	3/8	17	3	13	1918	1 ton F	1 3/4	3/8	30 1/2	1	13		1918	B	3 1/4	1 1/2	13 1/2	1	13	2
	1916	37	1 3/4	3/8	36	2	14		1919	5 tons	1 3/4	3/8	17	3	14	1918	1 ton F	1 3/4	3/8	30 1/2	1	14		1918	B	3 1/4	1 1/2	13 1/2	1	14	2
	1917	37	1 3/4	3/8	34 1/2	2	15		1919	5 tons	1 3/4	3/8	17	3	15	1918	1 ton F	1 3/4	3/8	30 1/2	1	15		1918	B	3 1/4	1 1/2	13 1/2	1	15	2
	1918	41	1 3/4	3/8	34 1/2	2	16		1919	5 tons	1 3/4	3/8	17	3	16	1918	1 ton F	1 3/4	3/8	30 1/2	1	16		1918	B	3 1/4	1 1/2	13 1/2	1	16	2
	1919	43	1 3/4	3/8	34 1/2	2	17		1919	5 tons	1 3/4	3/8	17	3	17	1918	1 ton F	1 3/4	3/8	30 1/2	1	17		1918	B	3 1/4	1 1/2	13 1/2	1	17	2
	1921	43	1 3/4	3/8	34 1/2	2	18		1919	5 tons	1 3/4	3/8	17	3	18	1918	1 ton F	1 3/4	3/8	30 1/2	1	18		1918	B	3 1/4	1 1/2	13 1/2	1	18	2
Alter.....	1915	A-27	1 3/4	3/8	28 1/2	2	19	Beggs.....	1918	.....	1 3/4	3/8	33 1/2	2	19	1916	T	1 3/4	3/8	40 1/2	1	19		1918	B	3 1/4	1 1/2	13 1/2	1	19	2
	1916	C	1 3/4	3/8	27 1/2	2	20		1920	.....	2 1/4	3/8	40 1/2	2	20	1917	T-17	2 1/4	3/8	42	2	20		1918	B	3 1/4	1 1/2	13 1/2	1	20	2
Amer.Six.	1916	A-Ser 1	2 1/4	3/8	42	2	21	Bell.....	1916	A-16	1 3/4	3/8	27 1/2	2	21	1918	U	1 3/4	3/8	40 1/2	1	21		1918	B	3 1/4	1 1/2	13 1/2	1	21	2
	1917	A-Ser 1	2 1/4	3/8	42	2	22		1917	A-17	1 3/4	3/8	27 1/2	2	22	1919	U-19	1 3/4	3/8	40 1/2	1	22		1918	B	3 1/4	1 1/2	13 1/2	1	22	2
	1918	B-30	2 1/4	3/8	44	2	23	Ben Hur.	1918	17	2 1/4	3/8	44	2	23	1920	V	2 1/4	3/8	46 1/2	2	23		1918	B	3 1/4	1 1/2	13 1/2	1	23	2
	1919	.....	2 1/4	3/8	44	2	24	Bethlehem	1918	D-2 tons	2 1/4	3/8	38	2	24	1921	V	2 1/4	3/8	46 1/2	2	24		1918	B	3 1/4	1 1/2	13 1/2	1	24	2
	1920	.....	2 1/4	3/8	42	2	25		1918	E-3 tons	2 1/4	3/8	38	2	25	1919	19	2 1/4	3/8	42	2	25		1918	B	3 1/4	1 1/2	13 1/2	1	25	2
	1921	C-6	2 1/4	3/8	42	2	26		1919	D	1 3/4	3/8	40 1/2	2	26	1919	26	2 1/4	3/8	42	2	26		1918	B	3 1/4	1 1/2	13 1/2	1	26	2
American Beauty	1920	All	2 1/4	3/8	40	2	27	Biddle.....	1919	F	2 1/4	3/8	50	3	27	1919	26-B	2 1/4	3/8	42	2	27		1918	B	3 1/4	1 1/2	13 1/2	1	27	2
Anderson	1916	200A	2 1/4	3/8	47 1/2	2	28		1916	D	1 3/4	3/8	36	2	28	1919	26-B	2 1/4	3/8	42	2	28		1918	B	3 1/4	1 1/2	13 1/2	1	28	2
	1917	200A	2 1/4	3/8	47 1/2	2	29		1916	D	1 3/4	3/8	36	2	29	1919	26-B	2 1/4	3/8	42	2	29		1918	B	3 1/4	1 1/2	13 1/2	1	29	2
	1918	300A	2 1/4	3/8	47 1/2	2	30		1917	D	1 3/4	3/8	36	2	30	1919	26-B	2 1/4	3/8	42	2	30		1918	B	3 1/4	1 1/2	13 1/2	1	30	2
	1919	300A	2 1/4	3/8	47 1/2	2	31		1917	D-17	1 3/4	3/8	36	2	31	1919	26-B	2 1/4	3/8	42	2	31		1918	B	3 1/4	1 1/2	13 1/2	1	31	2
Apperson	1921	Ser. 40	2 1/4	3/8	41 1/2	2	32		1917	H-17	1 3/4	3/8	36	2	32	1919	26-B	2 1/4	3/8	42	2	32		1918	B	3 1/4	1 1/2	13 1/2	1	32	2
	1914	4-45	1 3/4	3/8	34	2	33		1918	H	2 1/4	3/8	40	2	33	1919	26-B	2 1/4	3/8	42	2	33		1918	B	3 1/4	1 1/2	13 1/2	1	33	2
	1914	4-55	1 3/4	3/8	34	2	34		1918	H	2 1/4	3/8	40	2	34	1919	26-B	2 1/4	3/8	42	2	34		1918	B	3 1/4	1 1/2	13 1/2	1	34	2
	1914	6-45	1 3/4	3/8	34	2	35		1918	H	2 1/4	3/8	40	2	35	1919	26-B	2 1/4	3/8	42	2	35		1918	B	3 1/4	1 1/2	13 1/2	1	35	2
	1914	6-60	1 3/4	3/8	34	2	36		1918	H	2 1/4	3/8	40	2	36	1919	26-B	2 1/4	3/8	42	2	36		1918	B	3 1/4	1 1/2	13 1/2	1	36	2
	1915	4-40	1 3/4	3/8	34	2	37	Birch.....	1921	30, 44	1 3/4	3/8	39	1	37	1919	26-B	2 1/4	3/8	42	2	37		1918	B	3 1/4	1 1/2	13 1/2	1	37	2
	1915	4-48	1 3/4	3/8	34	2	38	Bour-	1919	20	2 1/4	3/8	43	2	38	1919	26-B	2 1/4	3/8	42	2	38		1918	B	3 1/4	1 1/2	13 1/2	1	38	2
	1916	6-60	1 3/4	3/8	34	2	39	Davis.	1920	.....	2 1/4	3/8	43	2	39	1919	26-B	2 1/4	3/8	42	2	39		1918	B	3 1/4	1 1/2	13 1/2	1	39	2
	1916	8	2 1/4	3/8	46	2	40		1921	21	2 1/4	3/8	48	2	40	1919	26-B	2 1/4	3/8	42	2	40		1918	B	3 1/4	1 1/2	13 1/2	1	40	2
	1917	6-17	2 1/4	3/8	46	2	41	Brewster.	1916	41	1 3/4	3/8	11 1/2	2	41	1919	26-B	2 1/4	3/8	42	2	41									



CAR	Year	Model	BRAKE LINING					No. of Pieces	CAR	Year	Model	BRAKE LINING					No. of Pieces	CAR	Year	Model	BRAKE LINING					No. of Pieces																												
			Internal			External						Internal			External						Internal			External																														
			Width	Thickness	Length	Width	Thickness					Length	Width	Thickness	Length	Width					Thickness	Length	Width	Thickness	Length																													
Detroit	1918	6-45	1 1/2	3/4	12	1 1/2	3/4	18	4	Franklin	1914	2	2 1/2	3/4	35	4	23	2	Holier	1918	206	1 1/2	3/4	2	3/4	37	2	2	Kissel Kar	1916	6-42	2	3/4	34	2	3/4	34	2																
	1918	F	1 1/2	3/4	12	1 1/2	3/4	18	4		1920	3	2 1/2	3/4	35	4	23	2		1918	206	1 1/2	3/4	2	3/4	37	2	2		1918	100 pt. 6	2	3/4	34	2	3/4	34	2																
	1916	G	1 1/2	3/4	20	1 1/2	3/4	20	4		1916	4	2 1/2	3/4	35	4	23	2		1916	206	1 1/2	3/4	2	3/4	37	2	2		1916	6-42	2	3/4	34	2	3/4	34	2																
	1916	H	1 1/2	3/4	20	1 1/2	3/4	20	4		1916	5	2 1/2	3/4	35	4	23	2		1916	206	1 1/2	3/4	2	3/4	37	2	2		1916	100 pt. 6	2	3/4	34	2	3/4	34	2																
	1917	L	1 1/2	3/4	20	1 1/2	3/4	20	4		1917	6	2 1/2	3/4	35	4	23	2		1917	206	1 1/2	3/4	2	3/4	37	2	2		1917	6-42	2	3/4	34	2	3/4	34	2																
	1917	N	1 1/2	3/4	20	1 1/2	3/4	20	4		1917	7	2 1/2	3/4	35	4	23	2		1917	206	1 1/2	3/4	2	3/4	37	2	2		1917	100 pt. 6	2	3/4	34	2	3/4	34	2																
	1918		1 1/2	3/4	10	1 1/2	3/4	20	4		1918	8	2 1/2	3/4	35	4	23	2		1918	206	1 1/2	3/4	2	3/4	37	2	2		1918	6-42	2	3/4	34	2	3/4	34	2																
Dixie Flyer	1916	L	1 1/2	3/4	28 1/2	1 1/2	3/4	30 1/2	2	Friend	1916	9	2 1/2	3/4	35	4	23	2	Hudson	1914	6-40	2 1/2	3/4	2 1/2	3/4	37	2	2	Kline Kar	1915	6-42	2	3/4	40	2	Re ar	Wh	4	Knox	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2					
	1918	LS-35	1 1/2	3/4	36	1 1/2	3/4	37	2		1918	9-B	3	2 1/2	3/4	35	4	23		2	1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4		57	2													
	1919	HS-50	1 1/2	3/4	36	1 1/2	3/4	36 1/2	2		1921	A	2 1/2	3/4	39 1/2	1 1/2	42 1/2	2		1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2		1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57		2														
	1921	HS70	1 1/2	3/4	36 1/2	1 1/2	3/4	36	2		1921	5-T	1 1/2	3/4	18	1 1/2	15 1/2	8		1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2		1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57		2														
	1916		1 1/2	3/4	16 1/2	1 1/2	3/4	42 1/2	4		1920	5-T	3 1/4	1 1/2	15 1/2	2 1/2	13 1/2	8		1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2		1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57		2														
	1917		1 1/2	3/4	14 1/2	1 1/2	3/4	42 1/2	4		1921	K-15, 16	3 1/2	1 1/2	13	3 1/2	13	8		1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2		1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57		2														
	1918		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4		1921	K-41	3 1/2	1 1/2	13	3 1/2	13	8		1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2		1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57		2														
Dodge	1916		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1921	K-71	3 1/2	1 1/2	15 1/2	3 1/2	15 1/2	8	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1917		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1921	K-101	4	1 1/2	17 1/2	4	17 1/2	8	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1918		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1921	G	1 1/2	3/4	35 1/2	1 1/2	35 1/2	8	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1919		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1921	G	2 1/4	4	44	2 1/2	21	20	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1920		1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1919	4	2 1/4	4	44	2 1/2	20	26	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1921	Tour	1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1917	77-B	3 1/2	1 1/2	15 1/2	3 1/2	12 1/2	8-2	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
	1915	H	1 1/2	3/4	14 1/2	1 1/2	3/4	19 1/2	4	1917	MA-17	3 1/2	1 1/2	13 1/2	3 1/2	13 1/2	8	1915	6-54	2 1/2	3/4	2 1/2	3/4	37	2	2	1915	16-7	35 Tract	6 1/4	1	57	2	3/4	57	2																		
Dorris	1916	IB-6	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2	Garford	1917	70B	3 1/2	1 1/2	11 1/2	3 1/2	47	4	Hurlburt	1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8	Lexington	1916	O	1 1/2	3/4	33	2	35	2	Liberty	1916	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2	Lincoln	1916	10	1 1/2	3/4	33	2	35	2
	1917	IC-6	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1917	70B	3 1/2	1 1/2	11 1/2	3 1/2	47	4		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
	1918	6-80	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1917	MA-17	3 1/2	1 1/2	13 1/2	3 1/2	13 1/2	8		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
	1919	6-80	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1917	70B	3 1/2	1 1/2	11 1/2	3 1/2	47	4		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
	1920	6-80	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1917	70B	3 1/2	1 1/2	11 1/2	3 1/2	47	4		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
	1921	6-80	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1917	MA-17	3 1/2	1 1/2	13 1/2	3 1/2	13 1/2	8		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
	1915		1 1/2	3/4	28 1/2	1 1/2	3/4	27 1/2	2		1917	70B	3 1/2	1 1/2	11 1/2	3 1/2	47	4		1918	R, R	1 1/2	3/4	33 1/2	1 1/2	33 1/2	8		1917	10-A	1 1/2	3/4	37 1/2	1 1/2	37 1/2	2		1916	10	1 1/2	3/4	33	2	35	2									
Dort	1916	A	1 1/2	3/4	28 1/2	1 1/2	3/4	27 1/2	2	Geronimo	1921	68-D	4	1 1/2	17 1/2	4	47	4	Imperial	1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2	Inter-Harvester	1916	6-40	2 1/2	3/4	2 1/2	3/4	37	2	Lexington	1916	6-P	1 1/2	3/4	33	2	35	2									
	1917		1 1/2	3/4	28 1/2	1 1/2	3/4	27 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1918	11	1 1/2	3/4	35 1/2	1 1/2	3/4	35 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1919	11	1 1/2	3/4	35 1/2	1 1/2	3/4	35 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1920	A	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1921	A	1 1/2	3/4	46 1/2	1 1/2	3/4	47 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1915		1 1/2	3/4	28 1/2	1 1/2	3/4	27 1/2	2		1920	68-D	4	1 1/2	17 1/2	4	47	4		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
Duty	1916	J-32	1 1/2	3/4	36	1 1/2	3/4	35	2	Globe	1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2	Indiana	1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2	Inter-Harvester	1916	6-40	2 1/2	3/4	2 1/2	3/4	37	2	Lexington	1916	6-P	1 1/2	3/4	33	2	35	2									
	1917		1 1/2	3/4	36	1 1/2	3/4	35	2		1916	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1918		1 1/2	3/4	36	1 1/2	3/4	35	2		1916	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P	1 1/2	3/4	33	2	35	2																		
	1919		1 1/2	3/4	36	1 1/2	3/4	35	2		1916	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1915	6-40	2 1/2	3/4	2 1/2	3/4	37	2		1916	6-P																								

ServiceExternal

\*Means Transmission Brake.

**\*On Transmission.**

**12 Sets of Internal Brakes**

• **Transmission Brake.**



\* Transmission Brake



CAR	Year	Model	PISTON RINGS			FAN BELTS			CAR	Year	Model	PISTON RINGS			FAN BELTS			CAR	Year	Model	PISTON RINGS			FAN BELTS													
			Number Used	Bore	Width of Groove	Type	Size	Number Used				Bore	Width of Groove	Type	Size	Number Used	Bore				Width of Groove	Type	Size	Number Used	Bore	Width of Groove	Type	Size									
Abbott-Detroit	1916	8-80	3	3 1/4	3/4				Apperson	1914	4-55	3	4 3/4	3/4				Autocar	1921	XXI-F	4	4 3/4	3/4				Brockway	1915	I	3	3 3/4	3/4					
	1916	6-44	3	3 1/4	3/4					1914	4-45	3	4 1/4	3/4					1921	XXI-G	3	4 1/4	3/4					1916	G	3	3 3/4	3/4					
	1917	6-44	3	3 1/4	3/4					1915	4-40	3	4 1/4	3/4						XXVI-B	3	4 1/4	3/4	1 1/4					1917	O	3	3 3/4	3/4				
	1918	8-80	3	3 1/4	3/4					1916	6-48	2	3 3/4	3/4	35x1					XXVI-Y	3	4 1/4	3/4						1917	J-2	3	3 3/4	3/4				
	1918	644	3	3 1/4	3/4					1916	6-60	3	4 1/4	3/4	35x1						3 tons	3	4 1/4	3/4					1918	K-3	3	3 3/4	3/4				
Ace	1921	All	3	3 1/4	3/4					1916	8	3	3 3/4	3/4	33x1						5 tons	3	4 1/4	3/4					1918	R	3	3 3/4	3/4				
Acme	1918	1 ton	3	3 1/4	3/4					1917	6-17	3	3 3/4	3/4	35x1								3	4 1/4	3/4					1913		3	3 3/4	3/4			
	1918	2 tons	3	3 1/4	3/4					1917	8-17	3	3 3/4	3/4									3	4 1/4	3/4					1918		3	3 3/4	3/4			
	1918	3 1/2 tons	3	3 1/4	3/4					1918	8-18	3	3 3/4	3/4									3	4 1/4	3/4					1914		3	3 3/4	3/4			
	1920	All	3	3 1/4	3/4					1920	8-20	3	3 3/4	3/4	35x1								3	4 1/4	3/4					1915	508-700	3	3 3/4	3/4			
	1919	B, A	3	3 1/4	3/4					1921	8-21	3	3 3/4	3/4	38x1 1/4								3	4 1/4	3/4					1915	C-24	3	3 3/4	3/4			
Adams-Lancia	1917	35A	3	3 1/4	3/4				Argonne	1920		3	3 3/4	3/4	39x1 1/4								3	4 1/4	3/4					1915	C-25	3	3 3/4	3/4			
	1917	35B	3	3 1/4	3/4				Astra	1920		3	3 3/4	3/4									3	4 1/4	3/4					1915	C-38	3	3 3/4	3/4			
A.E.C.	1915	6-50	3	3 1/4	3/4				Arbens	1914	All	3	4 1/4	3/4									3	4 1/4	3/4					1915	37	3	3 3/4	3/4			
Alco	1913	11	3	3 1/4	3/4				Atlas	1918	18	3	3 3/4	3/4									3	4 1/4	3/4					1915	54	3	3 3/4	3/4			
All-Amer	1919	A	3	3 1/4	3/4				Argo	1910	All	3	3 3/4	3/4									3	4 1/4	3/4					1915	55	3	3 3/4	3/4			
	1921	B-1, C-1	3	3 1/4	3/4				Armleder	1916	HW	3	4 1/2	3/4									3	4 1/4	3/4					1915	55	3	3 3/4	3/4			
Allen	1915	38	3	3 1/4	3/4					1916	KW	3	4 1/2	3/4									3	4 1/4	3/4					1915	C-4	3	3 3/4	3/4			
	1915	40	3	3 1/4	3/4					1918	KW-2	3	4 1/2	3/4									3	4 1/4	3/4					1916	D-44	3	3 3/4	3/4			
	1915	33	3	3 1/4	3/4					1919	KW-3 1/2	4	4 1/4	3/4	35x1 1/4								3	4 1/4	3/4					1916	D-45	3	3 3/4	3/4			
	1915	34	3	3 1/4	3/4					1921	20-1 Ton	4	4 1/4	3/4	31x2								3	4 1/4	3/4					1916	D-46	3	3 3/4	3/4			
	1915	35	3	3 1/4	3/4					1921	HW-2 1/2	4	4 1/4	3/4	34x2								3	4 1/4	3/4					1916	D-47	3	3 3/4	3/4			
	1916	37	3	3 1/4	3/4					1921	KW-3 1/2	4	4 1/4	3/4	36x2								3	4 1/4	3/4					1916	D-54	3	3 3/4	3/4			
	1916	36	3	3 1/4	3/4					1921	All	3	4 1/4	3/4	33x1 1/4								3	4 1/4	3/4					1916	D-55	3	3 3/4	3/4			
	1915	36	3	3 1/4	3/4					1921	E, B1	4	4 3/4	3/4	28x2								3	4 1/4	3/4					1917	45	3	3 3/4	3/4			
	1919	41	3	3 1/4	3/4					1918	6C	3	3 3/4	3/4	35x2								3	4 1/4	3/4					1918	D-34	3	3 3/4	3/4			
	1919	43	3	3 1/4	3/4					1916	6D	3	4 1/2	3/4									3	4 1/4	3/4					1918	D-35	3	3 3/4	3/4			
	1920	43	3	3 1/4	3/4					1917	7R	3	4 1/2	3/4									3	4 1/4	3/4					1918	D-37	3	3 3/4	3/4			
	1921	43	3	3 1/4	3/4					1917	7C	3	4 1/4	3/4									3	4 1/4	3/4					1918	E-49	3	3 3/4	3/4			
Alter	1915	4-27	3	3 1/4	3/4					1917	7D	3	4 1/4	3/4									3	4 1/4	3/4					1919	All	3	3 3/4	3/4			
	1918	C	3	3 1/4	3/4					1918	7E	3	4 1/4	3/4									3	4 1/4	3/4					1920	All	3	3 3/4	3/4			
	1917	E-17	3	3 1/4	3/4					1918	7F	3	4 1/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1917	F-17	3	3 1/4	3/4					1918	7G	3	4 1/4	3/4									3	4 1/4	3/4					1920	20-A	3	3 3/4	3/4			
	1914	50	3	3 1/4	3/4					1918	7H	3	4 1/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1913	Scout	3	3 1/4	3/4					1921	20R	4	4 3/4	3/4	38x1 1/4								3	4 1/4	3/4					1920	20-A	3	3 3/4	3/4			
	1914	30	3	3 1/4	3/4					1921	7CX	3	4 1/4	3/4	30x1 1/4								3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
Amer. Six	1916	A-Ser 1	3	3 1/4	3/4					1921	7D	3	4 1/4	3/4	30x1 1/4								3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1917	A-Ser 1	3	3 1/4	3/4					1921	8E	3	4 1/4	3/4	30x1 1/4								3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1918	B-30	3	3 1/4	3/4					1915	4-40	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1919		3	3 1/4	3/4					1915	6-40	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1921	C-6	3	3 1/4	3/4					1915	6-40A	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
American (La France)	1914		3	3 1/4	3/4					1916	4-38	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1915		3	3 1/4	3/4					1916	6-38	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1916		3	3 1/4	3/4					1917	6-39	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
Ames	1914	45	3	3 1/4	3/4					1917	6-44	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1914		3	3 1/4	3/4					1918	6-44	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1915		3	3 1/4	3/4					1918	6-39B	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
Amplex	1914		3	3 1/4	3/4					1919	6-29H	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1916	K	3	3 1/4	3/4					1919	6-39K	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1916	EK	3	3 1/4	3/4					1920	6-39HCR	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
Ans-Strig	1917	Road	3	3 1/4	3/4					1916	6-39	3	3 3/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1917	Tour	3	3 1/4	3/4					1915	66	3	4 1/4	3/4									3	4 1/4	3/4					1919	A	3	3 3/4	3/4			
	1917																																				



CAR	Year	Model	PISTON RINGS		FAN BELTS	CAR	Year	Model	PISTON RINGS		FAN BELTS	CAR	Year	Model	PISTON RINGS		FAN BELTS	CAR	Year	Model	PISTON RINGS		FAN BELTS				
			Number Used	Width of Groove					Number Used	Width of Groove					Number Used	Width of Groove					Number Used	Width of Groove					
Chalmers	1915	32 (6-40)	3	3 1/2	f	39 1/2 x 1 1/4	Crow	1917	CE-35	3	3 1/2	f	31 1/2 x 3/4	Dorris	1915	H	3	3 1/2	f	38 x 3/4	Postoria	1916	C	3	3 1/2	f	38 x 3/4
	1915	35 (6-40)	3	3 1/2	f	37 x 1	Elkhart	1918	35	3	3 1/2	f	31 1/2 x 3/4		1915	I	3	3 1/2	f	38 x 3/4	Four-Wheel Drive	1917	4 Cyl.	3	3 1/2	f	38 x 3/4
	1916	32 (6-30)	3	3 1/2	f	39 1/2 x 1 1/4		1919	K-32	3	3 1/2	f	32 1/2 x 1 1/4		1916	LA-4	3	3 1/2	f	38 x 3/4		1916	BSig Ltg	3	3 1/2	f	38 x 3/4
	1916	35 (6-30)	3	3 1/2	f	37 x 1		1919	K-34	3	3 1/2	f	32 1/2 x 1 1/4		1916	LA-6	3	3 1/2	f	38 x 3/4		1917	BSig Ltg	3	3 1/2	f	38 x 3/4
	1916	35A	3	3 1/2	f	37 x 1		1919	K-36	3	3 1/2	f	32 1/2 x 1 1/4		1916	IB-6	3	3 1/2	f	38 x 3/4		1918		3	3 1/2	f	38 x 3/4
	1917	35	3	3 1/2	f	37 x 1		1919	H-42	3	3 1/2	f	32 1/2 x 1 1/4		1917	IC-6	3	3 1/2	f	38 x 3/4		1919	B	3	3 1/2	f	39 1/2 x 1 1/4
	1918	6-30	3	3 1/2	f	37 x 1		1919	H-44	3	3 1/2	f	32 1/2 x 1 1/4		1918	6-80	3	3 1/2	f	38 x 3/4		1921	B	3	3 1/2	f	39 1/2 x 1 1/4
	1919	6-30	3	3 1/2	f	37 x 1		1919	H-46	3	3 1/2	f	32 1/2 x 1 1/4		1919	6-80	3	3 1/2	f	38 x 3/4		1914	B	3	3 1/2	f	39 1/2 x 1 1/4
	1921	6-30P	3	3 1/2	f	37 1/2 x 1 1/4		1921	L	3	3 1/2	f	29 1/2 x 1 1/4		1920	6-8	3	3 1/2	f	41 1/2 x 1							
Champion	1920	K.O.	3	3 1/2	f	33 1/2 x 3 1/4	Crowther	1917		3	3 1/2	f	38 x 3/4	Dort	1915		3	3 1/2	f	28 x 3/4							
Chandler	1914		3	3 1/2	f	33 1/2 x 3 1/4	Duryea	1917		3	3 1/2	f	38 x 3/4		1916	A	3	3 1/2	f	28 x 3/4							
	1915		3	3 1/2	f	33 1/2 x 3 1/4	Cunningham	1914		3	3 1/2	f	38 x 3/4		1917	5	3	3 1/2	f	28 x 3/4							
	1916	Ser 17	3	3 1/2	f	32 1/2 x 1		1914		3	3 1/2	f	38 x 3/4		1917	9	3	3 1/2	f	28 1/2 x 1							
	1917	Ser 18	3	3 1/2	f	32 1/2 x 1		1915		3	3 1/2	f	38 x 3/4		1918	11	3	3 1/2	f	28 1/2 x 1							
	1918		3	3 1/2	f	32 1/2 x 1		1915	V	3	3 1/2	f	38 x 3/4		1919	11	3	3 1/2	f	30 x 1							
	1919		3	3 1/2	f	32 1/2 x 1		1916	V	3	3 1/2	f	38 x 3/4		1921	12A, 17A	3	3 1/2	f	28 1/2 x 1							
	1920	Ser 20	3	3 1/2	f	32 1/2 x 1		1917	V-2 Ser	3	3 1/2	f	38 x 3/4		1916	4-60	3	3 1/2	f	—							
	1921	N.S.	3	3 1/2	f	—x1		1918	V	3	3 1/2	f	38 x 3/4		1917	7-60	3	3 1/2	f	—							
Charter	1917	4-C	3	4 1/2	f	—		1919	V-3	3	3 1/2	f	38 x 3/4		1916		3	3 1/2	f	37 x 1							
Oak	1917	0-172	3	4 1/2	f	—	Daniels	1921	V-4	3	3 1/2	f	—		1917	B-17	3	3 1/2	f	37 x 1							
Chase	1918	0-173	3	3 1/2	f	—		1916	A	3	3 1/2	f	—		1917	E	3	3 1/2	f	—							
Chevrolet	1915	H2	3	3 1/2	f	—		1916	B	3	3 1/2	f	—		1917	B-35	3	3 1/2	f	—							
	1915	H4	3	3 1/2	f	—		1916	A	3	3 1/2	f	—		1918		3	3 1/2	f	37 x 1							
	1915	Baby Gr.	3	3 1/2	f	—		1917	B	3	3 1/2	f	—		1921	A	3	3 1/2	f	33 1/2 x 1							
	1915	H3	3	3 1/2	f	—		1918	A	3	3 1/2	f	—		1921	21	3	3 1/2	f	38 x 1							
	1915	Monroe	3	3 1/2	f	—		1918	B	3	3 1/2	f	—		1917	G-36	3	3 1/2	f	—							
	1916	Baby Gr.	3	3 1/2	f	—		1921	D-19	3	3 1/2	f	—		1916	J-32	3	3 1/2	f	—							
	1916	Ames y	3	3 1/2	f	—	Dart	1916	C	3	3 1/2	f	—		1918	C-8-48	3	3 1/2	f	—							
	1916	Roy Ma	3	3 1/2	f	—		1916	C	3	3 1/2	f	—														
	1916	4-90	3	3 1/2	f	—		1916	E	3	3 1/2	f	—														
	1917	4-90	3	3 1/2	f	—		1916	E	3	3 1/2	f	—														
	1917	Baby Gr.	3	3 1/2	f	—		1917	BB	3	3 1/2	f	—														
	1918	4-90	3	3 1/2	f	—		1917	CC	3	3 1/2	f	—														
	1918	F A B G	3	3 1/2	f	—		1918	CC-4	3	3 1/2	f	—														
	1918	D-5 Cyl	3	3 1/2	f	—																					
	1919	490	3	3 1/2	f	—																					
	1919	F B G T	3	3 1/2	f	—																					
	1920	FBT	3	3 1/2	f	—																					
	1920	490	3	3 1/2	f	—																					
	1919	D4, D5	3	3 1/2	f	—																					
Chicago	1917	C	3	3 1/2	f	—																					
Classic	1918	G-5	3	3 1/2	f	—																					
Cleveland	1917		3	3 1/2	f	—																					
	1921	40	3	3 1/2	f	—																					
Climber	1921	S-Six	3	3 1/2	f	—																					
Clyde	1916	L-90	3	3 1/2	f	—																					
	1916	L-45	3	3 1/2	f	—																					
	1916	L-65	3	3 1/2	f	—																					
	1917	L-30	3	3 1/2	f	—																					
	1917	L-25	3	3 1/2	f	—																					
Clydesdale	1921	120-C	4	4 1/2	f	46 1/2 x 2																					
Cole	1914	9-4	3	3 1/2	f	—																					
	1914	9-6	3	3 1/2	f	—																					
	1915	Big 6	3	3 1/2	f	—																					
	1915	10-4	3																								



PISTON RINGS														FAN BELTS														PISTON RINGS														FAN BELTS													
CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size																								
Hatfield	1916 J		3 3/4	3 3/4	3 3/4			Jackson	1915 4-68		3 3/4	3 3/4	3 3/4			Lewis	1915 VI		2 3/4	2 3/4	2 3/4			Marmon	1919 34		3 3/4	3 3/4	3 3/4			45x54-33°																							
	1916 K		3 3/4	3 3/4	3 3/4				1916 68		3 3/4	3 3/4	3 3/4				1919 6-6		2 3/4	2 3/4	2 3/4				1921 34		3 3/4	3 3/4	3 3/4			44x32																							
	1917 A		3 3/4	3 3/4	3 3/4				1916 34		3 3/4	3 3/4	3 3/4				1915 2-6		2 3/4	2 3/4	2 3/4			Martin	1914		3 3/4	3 3/4	3 3/4																										
	1918 A		3 3/4	3 3/4	3 3/4				1916 348		2 2/3	2 2/3	2 2/3				1915 Roadster		1 3/4	1 3/4	1 3/4			Mason	1915 B		3 3/4	3 3/4	3 3/4																										
	1919 A		3 3/4	3 3/4	3 3/4				1917 349		3 3/4	3 3/4	3 3/4				1916 Roadster		1 3/4	1 3/4	1 3/4				1914		3 3/4	3 3/4	3 3/4																										
	1919 C		3 3/4	3 3/4	3 3/4				1917 350		3 3/4	3 3/4	3 3/4				1915 Touring		2 3/4	2 3/4	2 3/4				1914		3 3/4	3 3/4	3 3/4																										
Haynes	1921 A-42		3 3/4	3 3/4	3 3/4				1918 349		3 3/4	3 3/4	3 3/4				1916 Touring		2 3/4	2 3/4	2 3/4				1915		3 3/4	3 3/4	3 3/4																										
	1914 26		3 3/4	3 3/4	3 3/4		33 1/2 x 1		1918 350		3 3/4	3 3/4	3 3/4				1917 10-A		3 3/4	3 3/4	3 3/4			Maxwell	1915 50-6		3 3/4	3 3/4	3 3/4			40 1/2 x 1																							
	1914 27		3 3/4	3 3/4	3 3/4				1921 6-38		3 3/4	3 3/4	3 3/4				1917 10-A		3 3/4	3 3/4	3 3/4				1914 25		3 3/4	3 3/4	3 3/4																										
	1914 28		3 3/4	3 3/4	3 3/4			Jeffrey	1914 4		3 3/4	3 3/4	3 3/4				1918 10-B		3 3/4	3 3/4	3 3/4				1915 25		3 3/4	3 3/4	3 3/4			40 1/2 x 1																							
	32		4 1/4	4 1/4	4 1/4				1914 6		3 3/4	3 3/4	3 3/4				1919 10-B		3 3/4	3 3/4	3 3/4				1916 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1																							
	1915 30		4 1/4	4 1/4	4 1/4		33 1/2 x 3/4		1915 6		3 3/4	3 3/4	3 3/4				1920 10-C		3 3/4	3 3/4	3 3/4				1915 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1																							
	32		4 1/4	4 1/4	4 1/4				1915 Chest 6		3 3/4	3 3/4	3 3/4				1921 10-C		3 3/4	3 3/4	3 3/4				1916 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1																							
	1915 30		3 3/4	3 3/4	3 3/4		33 1/2 x 3/4		1916 Chest 6		3 3/4	3 3/4	3 3/4				Leland B		3 3/4	3 3/4	3 3/4				1917 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1																							
	1916 34		4 3/4	4 3/4	4 3/4				1916		3 3/4	3 3/4	3 3/4				1915 M		3 3/4	3 3/4	3 3/4				1918 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1 1/2																							
	35		4 3/4	4 3/4	4 3/4			Jones	1917		3 3/4	3 3/4	3 3/4		35 1/2 x 1		Lippard-Stewart		3 3/4	3 3/4	3 3/4				1919 25		3 3/4	3 3/4	3 3/4			42 1/2 x 1 1/2																							
	16-7-36		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 M		3 3/4	3 3/4	3 3/4				1920 25, 1st lt		3 3/4	3 3/4	3 3/4			42 1/2 x 1 1/2																							
	16-7-37		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 B		3 3/4	3 3/4	3 3/4				1920 25, 2nd lt		3 3/4	3 3/4	3 3/4			42 1/2 x 1 1/2																							
	16-7-40		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 C		3 3/4	3 3/4	3 3/4				1919		3 3/4	3 3/4	3 3/4			44 1/2 x 1 1/2																							
	16-7-41		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 D		3 3/4	3 3/4	3 3/4				1919 W-6		3 3/4	3 3/4	3 3/4																										
	1917 38		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 D-W		3 3/4	3 3/4	3 3/4				1917 EW		3 3/4	3 3/4	3 3/4																										
	1917 39		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 C-W		3 3/4	3 3/4	3 3/4				1917 FW		3 3/4	3 3/4	3 3/4																										
	1917 43		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 D-W		3 3/4	3 3/4	3 3/4				1917 D		3 3/4	3 3/4	3 3/4																										
	1917 44		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 M-B		3 3/4	3 3/4	3 3/4				1918 EW		3 3/4	3 3/4	3 3/4																										
	1918 38		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1916 M-W		3 3/4	3 3/4	3 3/4				1918 FW		3 3/4	3 3/4	3 3/4																										
	1918 39		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1917 M-B		3 3/4	3 3/4	3 3/4				1918 D		3 3/4	3 3/4	3 3/4																										
	1918 44		4 3/4	4 3/4	4 3/4		35x3/4		1916		3 3/4	3 3/4	3 3/4				1917 M-W		3 3/4	3 3/4	3 3/4				1918 35-G		2 3/4	2 3/4	2 3/4																										
	1920 43, 44, 44r		3 3/4	3 3/4	3 3/4		34 1/2 x 3/4		1916		3 3/4	3 3/4	3 3/4				1918 F		3 3/4	3 3/4	3 3/4				1914 H		2 3/4	2 3/4	2 3/4																										
	1921 47		3 3/4	3 3/4	3 3/4		34 1/2 x 3/4		1916		3 3/4	3 3/4	3 3/4				1918 G		3 3/4	3 3/4	3 3/4				1914 M		2 3/4	2 3/4	2 3/4																										
Herschhoff	1915 4-16		3 3/4	3 3/4	3 3/4		36x3/4		1916		3 3/4	3 3/4	3 3/4				1918 15		3 3/4	3 3/4	3 3/4				1914 35K		2 3/4	2 3/4	2 3/4																										
Herf-Br.	1915 4-40		3 3/4	3 3/4	3 3/4		36x3/4		1916		3 3/4	3 3/4	3 3/4				1918 15-1 ton		3 3/4	3 3/4	3 3/4				1914 350		2 3/4	2 3/4	2 3/4																										
	1915 6-50		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918 16-2 ton		3 3/4	3 3/4	3 3/4				1915 22-70		2 3/4	2 3/4	2 3/4																										
	1916 4-35		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918 17-3 ton		3 3/4	3 3/4	3 3/4				1916 22-72		3 3/4	3 3/4	3 3/4			32x1																							
	1916 H-650		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918 R		5 1/4	5 1/4	5 1/4				1917 22-73		3 3/4	3 3/4	3 3/4			32x1																							
Higra...	1917 A		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918 R-5		5 1/4	5 1/4	5 1/4				1918 22-74		3 3/4	3 3/4	3 3/4			32x1																							
	1918 A		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918 M 5		5 1/4	5 1/4	5 1/4				1920		3 3/4	3 3/4	3 3/4			32x1																							
	1921 A-18		3 3/4	3 3/4	3 3/4				1916		3 3/4	3 3/4	3 3/4				1918		5 1/4	5 1/4	5 1/4				1919 22-74		3 3/4	3 3/4	3 3/4			32 1/2 x 1																							
Hollier...	1916 166		3 3/4	3 3/4	3 3/4		28x3/4		1916		3 3/4	3 3/4	3 3/4																																										



PISTON RINGS					FAN BELTS					PISTON RINGS					FAN BELTS					PISTON RINGS					FAN BELTS						
CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size	CAR	Year	Model	Number Used	Bore	Width of Groove	Type	Size
Moore...	1916	30	2	3 1/4	3/4	f		Overland.	1918	85-4	2	4 1/2	3/4	f	35 1/2x1	Pratt...	1915	50	3	3 3/4	3/4	f		Sayers Six	1921	DP	3	3 1/4	3/4	f	34 1/2x1 1/4
	1917	30	2	3 3/4	3/4	f			1918	88-6	2	3 3/4	3/4	f		Premier.	1916	6-50	4	4 1/4	3/4	f			1915	C	3	3 1/2	3/4	f	41 1/4x3/4
	1919	30-C	2	3 3/4	3/4	f			1918	89-6	2	3 3/4	3/4	f			1916	6-56	4	4 1/4	3/4	f									
	1920	F	2	3 3/4	3/4	f	32 1/2x1		1919	90	2	3 3/4	3/4	f	31x3/4		1917	6B	3	3 3/4	3/4	f	42 1/2x28°		1916	C-4	3	3 3/4	3/4	f	33x5/8-28°
Munkegon	1919	20	2	3 3/4	3/4	f	32 1/2x1		1919	83-BOE	2	3 3/4	3/4	f	33x1		1918	6C	3	3 3/4	3/4	f	42 1/2x28°		1916	D-3	3	3 3/4	3/4	f	33x5/8-28°
Murray	1916	Murray 8	3	3 3/4	3/4	f		Ow-Mag.	1918	O-36	2	3 3/4	3/4	f			1918	6B	3	3 3/4	3/4	f	42 1/2x28°		1917	C-4	3	3 3/4	3/4	f	33x5/8-28°
	1917	8	3	3 3/4	3/4	f			1918	M-25	2	3 3/4	3/4	f			1921	6D	3	3 3/4	3/4	f	39x3/4		1917	D-8	3	3 3/4	3/4	f	33x5/8-28°
	1918	1918	3	3 3/4	3/4	f		Packard.	1919	W-42	3	3 3/4	3/4	f			1916	D	3	3 3/4	3/4	f	39x3/4		1918	D-8	3	3 3/4	3/4	f	33x5/8-28°
Mutual Tr.	1920	2A, 2AP	4	4 1/4	3/4	f	37 1/2x2		1914	138	3	3 3/4	3/4	f			1917	F	3	3 3/4	3/4	f	26x3/4		1921	B-39	3	3 3/4	3/4	f	30 1/2x3/4-28°
Napoleon	1917	17-34	3	3 3/4	3/4	f	37 1/2x2		1914	348	3	3 3/4	3/4	f			1916	D	3	3 3/4	3/4	f	33x3/4		1915	F	4	5 3/4	3/4	f	30 1/4x3/4
	1918	18-35	3	3 3/4	3/4	f			1914	238	3	3 3/4	3/4	f			1916	Pull-Jr	3	3 3/4	3/4	f	33x3/4		1916	F	4	5 3/4	3/4	f	30 1/4x3/4
	1918	18-36	3	3 3/4	3/4	f			1915	338	3	3 3/4	3/4	f			1916	Pull-Jr	3	3 3/4	3/4	f	33x3/4		1915	T	4	5 3/4	3/4	f	
	1918	18-39	3	3 3/4	3/4	f			1914	448	3	3 3/4	3/4	f			1917	Ser-1917	3	3 3/4	3/4	f	26x3/4		1916	T	4	5 3/4	3/4	f	
Nash Six.	1918	681	3	3 3/4	3/4	f	41 1/2x5/8-28°		1918	3-25	4	3	3/4	f	42 1/2x4-45°		1915	Filliod	3	3 3/4	3/4	f	26x3/4		1917	T	4	5 3/4	3/4	f	
	1918	671	4	3 3/4	3/4	f	41 1/2x5/8-28°		1918	3-35	4	3	3/4	f	42 1/2x4-45°		1917	Regal	3	3 3/4	3/4	f	26x3/4		1917	T	4	5 3/4	3/4	f	
	1921	6-81	4	3 3/4	3/4	f	42 1/2x3/4		1919	3-25	4	3	3/4	f	45 1/2x4-45°		1916	Lt-4	3	3 3/4	3/4	f			1917	S	4	5 3/4	3/4	f	
National.	1915	A-A	3	3 3/4	3/4	f		Paige.	1919	3-35	4	3	3/4	f	45 1/2x4-45°		1916	Lt-4	3	3 3/4	3/4	f			1917	S	4	5 3/4	3/4	f	
	1915	A-B	3	3 3/4	3/4	f			1914	36	3	3 3/4	3/4	f	33x3/4		1917	Regal 8	3	3 3/4	3/4	f			1915	S	4	5 3/4	3/4	f	
	1916	High 6	3	3 3/4	3/4	f	33x1		1916	6-38	3	3 3/4	3/4	f	38x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	High 6	3	3 3/4	3/4	f	33x1		1916	6-46	3	3 3/4	3/4	f	38x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	A-C	3	3 3/4	3/4	f	22x1		1917	J-6-17	3	3 3/4	3/4	f	31x1		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	A-E	3	3 3/4	3/4	f	22x1		1917	K-6-17	3	3 3/4	3/4	f	31x1		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	A-F	3	3 3/4	3/4	f	22x1		1917	651	3	3 3/4	3/4	f	38x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1918	12-A-D	3	3 3/4	3/4	f	22x1		1917	646	3	3 3/4	3/4	f	38x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1918	12-A-E	3	3 3/4	3/4	f	22x1		1918		3	3 3/4	3/4	f	31x1		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	12-A-H	3	3 3/4	3/4	f	22x1		1919	6-40	3	3 3/4	3/4	f	35x1		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	12-A-H	3	3 3/4	3/4	f	22x1		1919	655	3	3 3/4	3/4	f	38x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1917	22-A-K	4	4 1/2	3/4	f	22x1		1921	6-42	3	3 3/4	3/4	f	36x1		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1918	6	3	3 3/4	3/4	f	37 1/2x1		1921	6-66	3	3 3/4	3/4	f	32x1 1/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1918	12	3	3 3/4	3/4	f	22x1		1914		4	4 1/4	3/4	f	28x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1919	SerAK12	4	4 1/2	3/4	f	24 1/2x1		1918	G-5	3	3 3/4	3/4	f	28x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1919	Ser-A-F	3	3 3/4	3/4	f	37 1/2x1		1921	6-55-E	3	3 3/4	3/4	f	36 1/2x1 1/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1920	Ser-EE	3	3 3/4	3/4	f	37 1/2x1		1920	P-25	4	3 3/4	3/4	f	36 1/2x1 1/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1921	Ser-BB	3	3 3/4	3/4	f	38x1 1/4		1921	A	4	3 3/4	3/4	f	38 1/2x1 1/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
Nelson.	1917		2	3 3/4	3/4	f		Parker.	1921	F-20	3	3 3/4	3/4	f	38x2		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1918	D-Tour	2	3 3/4	3/4	f	36 1/2x1 1/2		1921	J-20	3	3 3/4	3/4	f	38x2		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1919	D-4-29	2	3 3/4	3/4	f	36 1/2x1 1/2		1921	M-20	3	3 3/4	3/4	f	39 1/2x2		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
	1921		4	3 3/4	3/4	f	x1 1/4		1915	32	3	3 3/4	3/4	f	32x1 1/2		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
New Era.	1916	Simplex	3	3 3/4	3/4	f		Paterson.	1915	A 32	3	3 3/4	3/4	f	31 1/2x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/4	f	
Noble Tr.	1918	N-W 2	3	3 3/4	3/4	f			1915	6-48	3	3 3/4	3/4	f	31 1/2x3/4		1918	J	3	3 3/4	3/4	f			1916	T	4	5 3/4	3/		



# Spark Plug, Head Light Lens and Exhaust Pipe Sizes for Cars and Trucks from 1915 to 1921

**SPARK PLUGS**—L means Long; S means Short; EL means Extra Long; M means Metric.

CAR						CAR						CAR						CAR					
Year	Model	LENSES		Spark Plug Size	Exhaust Pipe	Year	Model	LENSES		Spark Plug Size	Exhaust Pipe	Year	Model	LENSES		Spark Plug Size	Exhaust Pipe	Year	Model	LENSES		Spark Plug Size	Exhaust Pipe
		Headlights	Outside Diameter					Headlights	Outside Diameter					Headlights	Outside Diameter					Headlights	Outside Diameter		
Abbott-Detroit	1915 Road	9	10 1/2	2 1/2	1 1/2	Armleder	1916 HW	7 1/2	8 1/2	2 1/2	2 1/2	Biddle	1919 H-3	9 1/2	10 1/2	2 1/2	2 1/2	Cadillac	1913 13	7	8 1/2	2 1/2	1 1/2
	1915 Tour	9	10 1/2	2 1/2	1 1/2		1916 KW	7 1/2	8 1/2	2 1/2	2 1/2		1920 H-3	9 1/2	10 1/2	2 1/2	2 1/2		1914				1 1/2
	1916 8-80	8 1/2	9 1/2	2 1/2	1 1/2		1918 KW-2	7 1/2	8 1/2	2 1/2	2 1/2	Bimel	1917 4 Tour	9	10 1/2	2 1/2	2 1/2		1915 All				1 1/2
	16-17 6-44	8 1/2	9 1/2	2 1/2	1 1/2		1918 KW-3 1/2	7 1/2	8 1/2	2 1/2	2 1/2		1917 4 Road	9	10 1/2	2 1/2	2 1/2		1916 All				1 1/2
	1918 8-80	8 1/2	9 1/2	2 1/2	1 1/2		1921 20-1T	7 1/2	8 1/2	2 1/2	2 1/2	Bourne							1917 All				1 1/2
	1918 644	8 1/2	9 1/2	2 1/2	1 1/2		1921 HW-2 1/2	7 1/2	8 1/2	2 1/2	2 1/2	Magnetic	1918 V M-2	9	10 1/2	2 1/2	2 1/2		1918 Type 57	7	8 1/2	2 1/2	1 1/2
Acc	1921 All 2 1/2 T	8	8 1/2	2 1/2	1 1/2		1921 KW-3 1/2	7 1/2	8 1/2	2 1/2	2 1/2	Tr.)							1919 Type 57	8 1/2	9 1/2	2 1/2	1 1/2
Acme	1918 1 ton	9 1/2	10 1/2	2 1/2	1 1/2	Atco	1921 A	6 1/2	8 1/2	2 1/2	2 1/2	Bour-	1916 16	9	10 1/2	2 1/2	2 1/2		1920				1 1/2
Adams	14 to 35A	9 1/2	10 1/2	2 1/2	1 1/2		1921 B, B1	6 1/2	8 1/2	2 1/2	2 1/2	Davis	1917 17	9	10 1/2	2 1/2	2 1/2		1921 59	8 1/2	9 1/2	2 1/2	1 1/2
Lancia	17 35B	9 1/2	10 1/2	2 1/2	1 1/2	Atterbury	1919 7 R, C	6 1/2	8 1/2	2 1/2	2 1/2		1918 18A	9	10 1/2	2 1/2	2 1/2		1916 1 ton B				1 1/2
Alco	1913 11	9 1/2	10 1/2	2 1/2	1 1/2		1920 7 R, C	6 1/2	8 1/2	2 1/2	2 1/2		1918 18B	9	10 1/2	2 1/2	2 1/2		1916 1 ton F				1 1/2
All-Amer	1919 A	9 1/2	10 1/2	2 1/2	1 1/2		1921 20R, 7CX	5 1/2	6 1/2	2 1/2	2 1/2	Brewster	1920	8	11 1/2	2 1/2	2 1/2		1917 1 ton B				1 1/2
	1920 AB	10	11	2 1/2	1 1/2		1921 7D, 8E	5 1/2	6 1/2	2 1/2	2 1/2		1921 21	8	11 1/2	2 1/2	2 1/2		1917 1 ton F				1 1/2
	1921 B-1, C1 1/2	6 1/2	8 1/2	2 1/2	1 1/2	Auburn	1915 4-40, 6-40	9	10 1/2	2 1/2	2 1/2		1916 41	9	10 1/2	2 1/2	2 1/2		1918 "Four"	8	9 1/2	2 1/2	1 1/2
Allen	1915 38, 40	8 1/2	9 1/2	2 1/2	1 1/2		1916 6-40, 38, 43	9	10 1/2	2 1/2	2 1/2		1917 41	9	10 1/2	2 1/2	2 1/2		1921 G-1 1/2	8 1/2	9 1/2	2 1/2	1 1/2
	1915 33, 34, 35	8 1/2	9 1/2	2 1/2	1 1/2		1917 6-39, 44	9	10 1/2	2 1/2	2 1/2		1918 41	9	10 1/2	2 1/2	2 1/2		1921 K-2 1/2	8 1/2	9 1/2	2 1/2	1 1/2
	1916 37	8 1/2	9 1/2	2 1/2	1 1/2		1918 6-44, 6-39	8 1/2	9 1/2	2 1/2	2 1/2		1919 41	9	10 1/2	2 1/2	2 1/2		1921 H2 1/2, M3 1/2				1 1/2
	1917 37	8 1/2	9 1/2	2 1/2	1 1/2		1919 6-29, 39	8 1/2	9 1/2	2 1/2	2 1/2	Briggs	1921 O2	8 1/2	9 1/2	2 1/2	2 1/2		1915 14	7 1/2	8 1/2	2 1/2	1 1/2
	1918 41	8 1/2	9 1/2	2 1/2	1 1/2		1920 6-39HXR	9 1/2	10 1/2	2 1/2	2 1/2	Detroit	1916 C5	7 1/2	8 1/2	2 1/2	2 1/2		1916 T				1 1/2
	1919 43	7 1/2	8 1/2	2 1/2	1 1/2	Austin	1915 66	9 1/2	10 1/2	2 1/2	3								1917 T-17				1 1/2
	1921 43	7 1/2	8 1/2	2 1/2	1 1/2		1916 48-66	9 1/2	10 1/2	2 1/2	3	Brinton	1918 H	8 1/2	9 1/2	2 1/2	2 1/2		1918 U				1 1/2
Alter	1915 4-27	8 1/2	9 1/2	2 1/2	1 1/2		1918 Highway	9 1/2	10 1/2	2 1/2	3		1921 F	8 1/2	9 1/2	2 1/2	2 1/2		1919 U-19	8 1/2	9 1/2	2 1/2	1 1/2
	1916 C	8 1/2	9 1/2	2 1/2	1 1/2		1919 Highway	9 1/2	10 1/2	2 1/2	3	Briscoe	1921 14	7 1/2	8 1/2	2 1/2	2 1/2		1920				1 1/2
	1917 EF-17	8 1/2	9 1/2	2 1/2	1 1/2	Autocar	1919 XXI-F	8	7 1/2	2 1/2	1 1/2		1914 B-15	7 1/2	8 1/2	2 1/2	2 1/2		1921 V	8 1/2	9 1/2	2 1/2	1 1/2
	1914 50	8 1/2	9 1/2	2 1/2	1 1/2		1919 XXI-F, G	8 1/2	7 1/2	2 1/2	1 1/2		1915 15	7 1/2	8 1/2	2 1/2	2 1/2		1916 21	9	10 1/2	2 1/2	1 1/2
	1913 Scout	8 1/2	9 1/2	2 1/2	1 1/2		1921 XXI-F, G	8 1/2	7 1/2	2 1/2	1 1/2		1916 4-38	7 1/2	8 1/2	2 1/2	2 1/2		1915 24	7 1/2	8 1/2	2 1/2	1 1/2
	1914 30	8 1/2	9 1/2	2 1/2	1 1/2		1921 XXI-F, G	8 1/2	7 1/2	2 1/2	1 1/2		1916 8-38	7 1/2	8 1/2	2 1/2	2 1/2		1915 26	7 1/2	8 1/2	2 1/2	1 1/2
Amer Six	1917 A-Ser 1	9	10 1/2	2 1/2	1 1/2	Avery Co.	1917 1 ton	9 1/2	10 1/2	2 1/2	1 1/2		1917 4-24	7 1/2	8 1/2	2 1/2	2 1/2		1915 26-B	7 1/2	8 1/2	2 1/2	1 1/2
	1919 B-30	9	10 1/2	2 1/2	1 1/2		1917 3 tons	9 1/2	10 1/2	2 1/2	1 1/2		1918 24	8	9 1/2	2 1/2	2 1/2		1915 29	7 1/2	8 1/2	2 1/2	1 1/2
	1920 B	9	10 1/2	2 1/2	1 1/2		1917 3 tons	9 1/2	10 1/2	2 1/2	1 1/2		1918 T-24	8	10 1/2	2 1/2	2 1/2		1915 32(6-40)	10 1/2	11 1/2	2 1/2	1 1/2
Ames	1914 44	8 1/2	9 1/2	2 1/2	1 1/2	Beck	1918 A	9 1/2	10 1/2	2 1/2	2 1/2		1919 4-24	7 1/2	8 1/2	2 1/2	2 1/2		1915 35(6-30)	10 1/2	11 1/2	2 1/2	1 1/2
	1914 45	8 1/2	9 1/2	2 1/2	1 1/2		1918 B	9 1/2	10 1/2	2 1/2	2 1/2		1920 4-24	8	9 1/2	2 1/2	2 1/2		1916 32(6-40)	10 1/2	11 1/2	2 1/2	1 1/2
	1914	8 1/2	9 1/2	2 1/2	1 1/2		1918 C	9 1/2	10 1/2	2 1/2	2 1/2		1921 4-34	8 1/2	9 1/2	2 1/2	2 1/2		1916 35(6-30)	10 1/2	11 1/2	2 1/2	1 1/2
	1915	8 1/2	9 1/2	2 1/2	1 1/2		1919 A	9 1/2	10 1/2	2 1/2	2 1/2	Brockway	1919 5H	7 1/2	8 1/2	2 1/2	2 1/2		1916 35A	9	10 1/2	2 1/2	1 1/2
Amplex	1914	8 1/2	9 1/2	2 1/2	1 1/2		1919 B	9 1/2	10 1/2	2 1/2	2 1/2		1915 I	7 1/2	8 1/2	2 1/2	2 1/2		1917 35	9	10 1/2	2 1/2	1 1/2
	1916 K	8 1/2	9 1/2	2 1/2	1 1/2		1919 C	9 1/2	10 1/2	2 1/2	2 1/2		1920 S 2 1/2	7 1/2	8 1/2	2 1/2	2 1/2		1918 30	7 1/2	8 1/2	2 1/2	1 1/2
	1916 EK	8 1/2	9 1/2	2 1/2	1 1/2	Beggs	1921 T20	9 1/2	10 1/2	2 1/2	2 1/2	Buckeye	1913	7 1/2	8 1/2	2 1/2	2 1/2		1916 A	8 1/2	9 1/2	2 1/2	1 1/2
Ama-Strig	1917 Road	9	10 1/2	2 1/2	1 1/2		1916 A-16	9 1/2	10 1/2	2 1/2	2 1/2		1914	7 1/2	8 1/2	2 1/2	2 1/2		1916 B	8 1/2	9 1/2	2 1/2	1 1/2
	1917 Tour	9	10 1/2	2 1/2	1 1/2		1917 A-17	9 1/2	10 1/2	2 1/2	2 1/2		1915 C-24	7 1/2	8 1/2	2 1/2	2 1/2		1918				1 1/2
Anderson	1916 200A	9	10 1/2	2 1/2	1 1/2		1918 18	9 1/2	10 1/2	2 1/2	2 1/2		1915 C-25	7 1/2	8 1/2	2 1/2	2 1/2		1919				1 1/2
	1917 200A	9	10 1/2	2 1/2	1 1/2	Ben Hur	1917 17	9 1/2	10 1/2	2 1/2	2 1/2		1915 C-36	7 1/2	8 1/2	2 1/2	2 1/2		1920 Ser 20	8 1/2	9 1/2	2 1/2	1 1/2
	1918 300A	9	10 1/2	2 1/2	1 1/2		1918 17	9 1/2	10 1/2	2 1/2	2 1/2		1915 37	7 1/2	8 1/2	2 1/2	2 1/2		1921 N.S. 1921				1 1/2
	1917 300A	9	10 1/2	2 1/2	1 1/2	Bessemer	1915 A	9 1/2	10 1/2	2 1/2	2 1/2		1915 94	7 1/2	8 1/2	2 1/2	2 1/2		1918 0-173				1 1/2
	1918 43	9 1/2	10 1/2	2 1/2	1 1/2		1915 C	9 1/2	10 1/2	2 1/2	2 1/2		1915 55	7 1/2	8 1/2	2 1/2	2 1/2		1915 L	6 1/2	8 1/2	2 1/2	1 1/2
	1919 43	10	11	2 1/2	1 1/2		1916 A	9 1/2	10 1/2	2 1/2	2 1/2		1915 C-4	7 1/2	8 1/2	2 1/2	2 1/2		1915 H2	6 1/2	8 1/2	2 1/2	1 1/2
Apperson	1921 Sixes 40	7 1/2	8 1/2	2 1/2	1 1/2		1916 C	9 1/2	10 1/2	2 1/2	2 1/2		1916 D-44	7 1/2	8 1/2	2 1/2	2 1/2		1915 H4	6 1/2	8 1/2	2 1/2	1 1/2
	1914 4-45, 55	8 1/2	9 1/2	2 1/2	1 1/2		1916 E	9 1/2	10 1/2	2 1/2	2 1/2		1916 D-45	7 1/2	8 1/2	2 1/2	2 1/2		1915 Baby Gr				1 1/2
	1914 6-45, 60	8 1/2	9 1/2	2 1/2	1 1/2	Bethlehem	1916 H	9 1/2	10 1/2	2 1/2	2 1/2		1916 D-46	7 1/2	8 1/2	2 1/2	2 1/2		1915 H2 1/2				1 1/2
	1915 4-40, 6-48	10	11	2 1/2	1 1/2		1918 D-2 tons	7 1/2	8 1/2	2 1/2	2 1/2		1916 D-47	6 1/2	8 1/2	2 1/2	2 1/2		1915 H3	6 1/2	8 1/2	2 1/2	1 1/2
	1916 6-60	9	10 1/2	2 1/2	1 1/2		1918 E-3 tons	7 1/2	8 1/2	2 1/2	2 1/2		1916 D-55	8 1/2	9 1/2	2 1/2	2 1/2		1915 Monroe				1 1/2
	1916 8	8 1/2	9 1/2	2 1/2	1 1/2		1919 D	7 1/2	8 1/2	2 1/2	2 1/2		1917 45	8 1/2	9 1/2	2 1/2	2 1/2		1916 Baby Gr				1 1/2
	1917 6-17	8 1/2	9 1/2	2 1/2	1 1/2		1919 E	7 1/2	8 1/2	2 1/2	2 1/2		1918 45	8 1/2	9 1/2	2 1/2	2 1/2		1916 Ames y				1 1/2
	1917 8-17	8 1/2	9 1/2	2 1/2	1 1/2		1919 F	7 1/2	8 1/2	2 1/2	2 1/2		1918 D-37	8 1/2	9 1/2	2 1/2	2 1/2		1916 Roy Ma				1 1/2
	1921 8-21	8 1/2	9 1/2	2 1/2	1 1/2	Biddle	1916 C	9 1/2	10 1/2	2 1/2	2 1/2		1918 E-49	8 1/2	9 1/2	2 1/2	2 1/2		1916 4-90				1 1/2
Argonne	1920	9	10 1/2	2 1/2	1 1/2		1916 D	9 1/2	10 1/2	2 1/2	2 1/2		1919 All						1917 4 90				1 1/2
Astra</																							



CAR	Year	Model	LENSES			Exhaust Pipe	CAR	Year	Model	LENSES			Exhaust Pipe	CAR	Year	Model	LENSES			Exhaust Pipe
			Opening in Run	Outside Diameter	Spark Plug Size					Opening in Run	Outside Diameter	Spark Plug Size					Opening in Run	Outside Diameter	Spark Plug Size	
Chevrolet	1918	4-90			2		Davis	1917	6J			2 1/4		Empire	1917	51			2 1/4	
	1918	FABG		8 1/2				1917	6K			2 1/4			1917	70			2 1/4	
	1918	D-3 Cyl			1 1/2			1918	6H						1917	70A				
	1919	490	7 1/2	8	2 1/2			1918	6I						1918	50				
	1919	F B G T		7 1/2	8 1/2			1918	6K						1918	70A				
	1920	FBT		8	2			1919	HI, L&P	8	8 1/2	2			1919	50				
	1920	490		8	2			1919	JM			2 1/4			1915	6-50				
	1919	D4, D5			1 1/2			1921	51 to 57	8 1/2	9 1/2	2 1/4			1916	Twin 6	9	10	1 1/2	
Cleveland	1921	40	7 1/2	8 1/2			Day Elder	1916	DE-Jr	8 1/2	9 1/2	2 1/4			1917		9	10		
Chamber	1921	S Six		10	2 1/2			1916	DE-Sr			1 1/2			1916					
Clydesdale	1921	120C	7 1/2	7	2 1/4			1917	DE-Jr			1 1/2			1917	33				
Coile	1914	4-4		10 1/2	2 1/4			1917	DE-Sr			1 1/2			1917	34				
	1914	9-6		10 1/2	2 1/4			1921	A, B	7 1/2	8 1/2	2 1/4			1921	A-2 1/2 T	6 1/4	7 1/2	2 1/4	
	1914	Big 6		10 1/2	2 1/4			1921	C, D, F	7 1/2	8 1/2	2 1/4			1920	A	7 1/2	8 1/2	2 1/4	
	1915	9-4		10 1/2	2 1/4			1921	E	7 1/2	8 1/2	2 1/4			1921	A	7 1/2	8 1/2	2 1/4	
	1915	9-6		10 1/2	2 1/4			1915	EQ			2 1/4								
	1915	Big 6		10 1/2	2 1/4			1916	EQ			2 1/4								
	1915	10-4	8 1/2	8	2 1/2			1919	B			2 1/4			1915	50	8 1/2	9 1/2	2 1/4	
	1915	Std 4	8 1/2	9	2			1921	D & E	8 1/2	9 1/2	2 1/4			1915	55	8 1/2	9 1/2	2 1/4	
	1915	Little 6	8 1/2	9	2			1916	Junior			2 1/4			1916	55	8 1/2	9 1/2	2 1/4	
	1916	4-40	8 1/2	9	2 1/2			1918	E2			2 1/4			1917	55	8 1/2	9 1/2	2 1/4	
	1916	6-66	8 1/2	9	2 1/2			1918	E2 1/2			2 1/4			1918	55	8 1/2	9 1/2	2 1/4	
	1916	8-50	8 1/2	9	2 1/2			1919	E2			2 1/4								
	1917	9-60	8 1/2	9 1/4	2 1/2			1919	E2 1/4			2 1/4								
	1917	8-61	8 1/2	9 1/4	2 1/2			1915	U			2 1/4								
	1917	8-62	8 1/2	9 1/4	2 1/2			1916	R			2 1/4								
	1918	870	8 1/2	9 1/4	2 1/2			1917	R			2 1/4								
	1919	Aero 870	8 1/2	9 1/4	2 1/2			1918	12			2 1/4								
	1920	All	8 1/2	9 1/4	2 1/2			1918	13			2 1/4								
	1921	870	8 1/2	9 1/4	2 1/2			1918	15			2 1/4								
Collier	1917	M	1 1/2	9 1/2	2 1/2			1920	K-12-B	4 1/2		2 1/4								
	1921	22 1/2 T		9 1/2	2 1/2			1917	10			2 1/4								
Columbia	1917	A	8	8 1/2	1 1/2			1917	10			2 1/4								
	1918	E	8	8 1/2	2			1915	C			1 1/2								
	1919	E	8	8 1/2	2			1915	B-6			1 1/2								
	1920	C, D, E, H, C, S		8 1/2	2 1/2			1916	F			2								
Comet	1917	C-50		9 1/2	2 1/2			1916	6-45	9 1/2		2 1/4								
	1918	C-51		9 1/2	2 1/2			1917	6-46	9 1/2		2 1/4								
	1920	C-53		8 1/2	2 1/4			1918	6-45	8 1/2		2 1/4								
Commerce	1917	E		8 1/2	2 1/2			1916	D	8 1/2		2 1/4								
	1918	E, EP	8	7 1/2	2 1/2			1916	G	8 1/2		2 1/4								
Concord	1919	A		8 1/2	2 1/2			1916	H	8 1/2		2 1/4								
	1920	A-B		8 1/2	2 1/2			1917	L	8 1/2		2 1/4								
	1921	BX		8 1/2	2 1/2			1917	N	8 1/2		2 1/4								
Corbitt	1917	C		10	1 1/2			1918	56	8 1/2		2 1/4								
	1918	B		10	1 1/2			1916	L	8 1/2		2 1/4								
	1918	C		10	1 1/2			1918	LS-35	7 1/2	8 1/2	2 1/4								
Cortland	1916	6-35	8 1/2	8 1/2	2 1/2			1919	HS-50	8 1/2	9 1/2	2 1/4								
Cart	1917	6-35	8 1/2	8 1/2	2 1/2			1920	HS-70	7 1/2	8 1/2	2 1/4								
Crawford	1916	6-35	8 1/2	8 1/2	2 1/2			1916	G	8 1/2		2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	H	8 1/2		2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	I	8 1/2		2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IA-4	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IA-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IB-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916	IC-6	8 1/2	9 1/2	2 1/4								
	1917	6-35	8 1/2	8 1/2	2 1/2			1916												



CAR	Year	Model	LENSES				CAR	Year	Model	LENSES				CAR	Year	Model	LENSES			
			Headlights		Spark Plug Size	Exhaust Pipe				Headlights		Spark Plug Size	Exhaust Pipe				Headlights		Spark Plug Size	Exhaust Pipe
			Opening in Rim	Outside Diameter						Opening in Rim	Outside Diameter						Opening in Rim	Outside Diameter		
Imperial	1915	64	8	5 1/2			Koehler	1918	K				Mabohm	1918	A					
	1916	64	8	5 1/2			Krit	1915	L					1918	B					
	1917	16	8	5 1/2				1914	M					1919	B					
Independ	1921	F-1 1/2	8	5 1/2			LaFayette	1921	134	9 1/2	1 1/2			1921	B					
	1921	H-2 1/2	8	5 1/2			Lambert	1914		9 1/2				1917	B					
	1921	K-3 1/2	8	5 1/2			Lancier	1918		9 1/2				1914						
Inter-Harvester	1916	F	8	5 1/2			Lapeer	1918		9 1/2				1915						
	1917	H	8	5 1/2			Larrabee	1921	U, K, L, W	9	2 1/2			1915						
	1918	F	8	5 1/2			Laurel	1917		9				1915	48-A	10	7 1/2	2 1/2		
	1918	H	7 1/2	8 1/2			Lennox	1915		8 1/2	9 1/2	7 1/2		1915	B	10	7 1/2	2 1/2		
	1918	H	7 1/2	8 1/2				1916		8 1/2				1915	G	10	7 1/2	2 1/2		
	1921	F, H, K, G, L	7 1/2	8 1/2			Leach	1920	20-A, B, C, D	8 1/2	8 1/2	7 1/2		1915	4	10	7 1/2	2 1/2		
Indiana	1918	D	8	5 1/2			Leccina	1917		8 1/2	9 1/2	7 1/2		1915	K	8 1/2	9 1/2	2 1/2		
	1918	R	8	5 1/2			Lexington-Howard	1915	M	8 1/2	9 1/2	7 1/2		1917	B	8 1/2	9 1/2	2 1/2		
	1919	L	8	5 1/2				1916	O	8 1/2	9 1/2	7 1/2		1914	41	9	9 1/2	2 1/2		
	1920	20, 25, 35	10	7 1/2				1916	P	8 1/2	9 1/2	7 1/2		1914	48	9 1/2	10 1/2	2 1/2		
Internat'l Mack	1915	T	8	5 1/2				1917	6-N	8 1/2	9 1/2	7 1/2		1915	41	9 1/2	10 1/2	2 1/2		
	1916	T	8	5 1/2				1917	6-N	8 1/2	9 1/2	7 1/2		1915	34	9 1/2	10 1/2	2 1/2		
	1917	F	7 1/2	8 1/2			Lexington	1918	6-6R	9	9 1/2	7 1/2		1916	41	9 1/2	10 1/2	2 1/2		
	1918	F	7 1/2	8 1/2				1919	R	9	9 1/2	7 1/2		1917	41	9 1/2	10 1/2	2 1/2		
Interstate	1915	T	8	5 1/2				1920	T	7 1/2	8 1/2	7 1/2		1918	34	9 1/2	10 1/2	2 1/2		
	1916	T	8	5 1/2			Lewis	1915	6-6	9	9 1/2	7 1/2		1919	34	9 1/2	10 1/2	2 1/2		
	1917	F	7 1/2	8 1/2				1915	VI	9	9 1/2	7 1/2		1920	B	9	9 1/2	2 1/2		
	1918	F	7 1/2	8 1/2				1915	6-6	9	9 1/2	7 1/2		1915						
Isotta-Fraschini	1915	44	9	10 1/4				1915	2-6	9	9 1/2	7 1/2		1916						
Jackson	1915	46	9	10 1/4				1915	Roadster	9	9 1/2	7 1/2		1917	4-36					
	1916	6-48	9	10 1/4				1916	Roadster	9	9 1/2	7 1/2		1917	6-48					
	1916	68	9	9 1/2				1916	Touring	9	9 1/2	7 1/2		1915	50-8					
	1916	34	8 1/2	9 1/2			Liberty	1916	10-A	8 1/2	9 1/2	7 1/2		1914	25	7 1/2	8 1/2	1 1/2		
	1916	348	8 1/2	9 1/2				1917	10-A	8 1/2	9 1/2	7 1/2		1915	25	7 1/2	8 1/2	1 1/2		
	1917	349	8 1/2	9 1/2				1918	10-B	8 1/2	9 1/2	7 1/2		1915	25	7 1/2	8 1/2	1 1/2		
	1917	350	8 1/2	9 1/2				1919	10-B	8 1/2	9 1/2	7 1/2		1916	25	7 1/2	8 1/2	1 1/2		
	1918	349	8 1/2	9 1/2				1919	B	9	9 1/2	7 1/2		1917	25	7 1/2	8 1/2	1 1/2		
	1918	350	8 1/2	9 1/2				1920	10C	8 1/2	9	7 1/2		1918	25	7 1/2	8 1/2	1 1/2		
Jaffrey	1914	4	7 1/2	8 1/2				1921	10-C	8 1/2	9	7 1/2		1919	25	7 1/2	8 1/2	1 1/2		
	1914	6	9	9 1/2			Lippard	1915	M	9	9 1/2	7 1/2		1920	25, 1st lt	8 1/2	9 1/2	1 1/2		
	1915	6	9	9 1/2			Stewart	1916	M	9	9 1/2	7 1/2		1920	25, 2nd lt	8 1/2	9 1/2	1 1/2		
	1915	Chest 6	8 1/2	9 1/2				1916	B	9	9 1/2	7 1/2		1919		7 1/2	8 1/2	1 1/2		
	1916	Chest 6	8 1/2	9 1/2				1916	C	9	9 1/2	7 1/2		1918	5-Pass.	7 1/2	8 1/2	1 1/2		
Jones	1916		7 1/2	8 1/2				1916	D	9	9 1/2	7 1/2		1917	EW	7 1/2	8 1/2	1 1/2		
	1916		7 1/2	8 1/2				1916	BW	9	9 1/2	7 1/2		1917	FW	7 1/2	8 1/2	1 1/2		
	1916		7 1/2	8 1/2				1916	C-W	9	9 1/2	7 1/2		1917	D	7 1/2	8 1/2	1 1/2		
	1918	27	7 1/2	8 1/2				1916	D-W	9	9 1/2	7 1/2		1918	EW	7 1/2	8 1/2	1 1/2		
	1919	27	7 1/2	8 1/2				1916	M-W	9	9 1/2	7 1/2		1918	FW	7 1/2	8 1/2	1 1/2		
	1919	28	7 1/2	8 1/2			Little	1916		9	9 1/2	7 1/2		1918	D	7 1/2	8 1/2	1 1/2		
	1920		8 1/2	9 1/2			Giant	1916	15	9	9 1/2	7 1/2		1920	GJ	9	9 1/2	2 1/2		
Jordan	1916	13	8 1/2	9 1/2				1918	15-1 Ton	9	9 1/2	7 1/2		1914	35-G	9	9 1/2	2 1/2		
	1917	C-60	8 1/2	9 1/2				1918	16-2 Ton	9	9 1/2	7 1/2		1914	H	9	9 1/2	2 1/2		
	1918	17	8 1/2	9 1/2				1918	17-3 1/2 Ton	9	9 1/2	7 1/2		1914	M	9	9 1/2	2 1/2		
	1919	1919	8 1/2	9 1/2				1915	R	9	9 1/2	7 1/2		1914	35K	9	9 1/2	2 1/2		
	1920	F	8 1/2	9 1/2			Locomobile	1915	R-5	9	9 1/2	7 1/2		1914	350	9	9 1/2	2 1/2		
	1920	M	8 1/2	9 1/2				1915	M 5	9	9 1/2	7 1/2		1915	22-70	9	9 1/2	3		
Kearns	1921	H	8 1/2	9 1/2				1916		9	9 1/2	7 1/2		1916	22-72	9	9 1/2	3		
Keeton	1915		8 1/2	9 1/2				1917		9	9 1/2	7 1/2		1917	22-73	9	9 1/2	3		
Kelly-Springfield	1915		8 1/2	9 1/2				1917	2-38	9	9 1/2	7 1/2		1918	22-74	9 1/2	9 1/2	3		
	1916		8 1/2	9 1/2				1919	2-48	9	9 1/2	7 1/2		1920		9 1/2	9 1/2	3		
	1919	K-31	8 1/2	9 1/2				1920	48	8 1/2	9 1/2	7 1/2		1918	19-50	8 1/2	9 1/2	3		
	1919	K-35	8 1/2	9 1/2			Lorraine	1915	30	8 1/2	9 1/2	7 1/2		1921	R, RR	7 1/2	8 1/2	3		
	1919	K-35	8 1/2	9 1/2			Lozier	1915	32	8 1/2	9 1/2	7 1/2		1915	22	7 1/2	8 1/2	3		
	1919	K-32	8 1/2	9 1/2				1915	34	8 1/2	9 1/2	7 1/2		1915	25	7 1/2	8 1/2	3		
	1919	K-36	8 1/2	9 1/2				1915	34	8 1/2	9 1/2	7 1/2		1916	22	7 1/2	8 1/2	3		
	1919	K-40	8 1/2	9 1/2				1916	30	8 1/2	9 1/2	7 1/2		1916	25	7 1/2	8 1/2	3		
	1919	K-45	8 1/2	9 1/2				1916	32	8 1/2	9 1/2	7 1/2		1917	22	7 1/2	8 1/2	3		
	1919	K-50	8 1/2	9 1/2				1916	34	8 1/2	9 1/2	7 1/2		1917	25	7 1/2	8 1/2	3		
	1919	K-52	8 1/2	9 1/2				1917	30	8 1/2	9 1/2	7 1/2		1918		7 1/2	8 1/2	3		
	1921	K31, 34, 35, 36	10	7 1/2				1917	32	8 1/2	9 1/2	7 1/2		1919	25G	7 1/2	8 1/2	3		
	1921	K40, 41, 42, 50, 60	10	7 1/2				1917	32	8 1/2	9 1/2	7 1/2		1921		7 1/2	8 1/2	3		
Kent	1917		8 1/2	9 1/2				1917	34	8 1/2	9 1/2	7 1/2		1915		7 1/2	8 1/2	3		
Kimball	1921	All	8 1/2	9 1/2				1918	82	8 1/2	9 1/2	7 1/2		1916	A	7 1/2	8 1/2	3		
King	1915	C	8 1/2	9 1/2			Louverne	1918	84	8 1/2	9 1/2	7 1/2		1917	B	7 1/2	8 1/2	3		
	1916	8-D	8 1/2	9 1/2				1916	P-5	8 1/2	9 1/2	7 1/2		1917	A	7 1/2	8 1/2	3		
	1916	8-D	8 1/2	9 1/2				1917	P-5	8 1/2	9 1/2	7 1/2		1918		7 1/2	8 1/2	3		
	1916	8-E	8 1/2	9 1/2				1918	P-5	8 1/2	9 1/2	7 1/2		1915	LT-4	8 1/2	9 1/2	3 1/2		
	1917	8-E	8 1/2	9 1/2			McFarlan	1915		8 1/2	9 1/2	7 1/2		1915	LT-6	8 1/2	9 1/2	3 1/2		
	1918	EE	8 1/2	9 1/2				1916		8 1/2	9 1/2	7 1/2		1916	6 of 16	8 1/2	9 1/2	3 1/2		
	1918	8	8 1/2	9 1/2				1917		8 1/2	9 1/2	7 1/2		1916	Eight	8 1/2	9 1/2	3 1/2		
	1919	G	8 1/2	9 1/2				1919	19-X	8 1/2	9 1/2	7 1/2		1917	C-42	9 1/2	9 1/2	3 1/2		
Klondike	1920	H	8 1/2	9 1/2				1920		10 1/2	7 1/2	3 1/2		1917	D-40 Sp	7 1/2	7 1/2	3 1/2		
	1915	4-36	8	9				1921	1921	10 1/2	7 1/2	3 1/2		1918	C-42	10	7 1/2	3 1/2		
	1915	6-42	8	9			McIntyre	1915		7 1/2	8 1/2	3 1/2		1918	D-40	9	9 1/2	3 1/2		
	1916	4-32	8	9			McLeughlin	1914	6-50	7 1/2	8 1/2	3 1/2		1918	E-40	8 1/2	9 1/2	3 1/2		
	1916	6-42	8	10				1915	6-50	7 1/2	8 1/2	3 1/2		1920	F-40	8 1/2	9 1/2	3 1/2		



CAR	Year	Model	LENSES				CAR	Year	Model	LENSES				CAR	Year	Model	LENSES				CAR	Year	Model	LENSES			
			Headlights		Spark Plug Size	Exhaust Pipe Diameter				Headlights		Spark Plug Size	Exhaust Pipe Diameter				Headlights		Spark Plug Size	Exhaust Pipe Diameter				Headlights		Spark Plug Size	Exhaust Pipe Diameter
			Opening in Rim	Outside Diameter						Opening in Rim	Outside Diameter						Opening in Rim	Outside Diameter						Opening in Rim	Outside Diameter		
Oldsmobile	1918 45		8 1/2	3 1/2	1 1/2		Peerless	1915 60-6	8 1/2	9 1/2	M	3		Roamer	1920 C-6-54		8 1/2	3 1/2	2 1/2		Stearns	1918 8		8 1/2	3 1/2	1 1/2	
	1918 45-A		8 1/2	3 1/2	1 1/2			1915 DD	8 1/2	9 1/2	M	2 1/2			1921 4-75 E		8 1/2	3 1/2	2 1/2			1917 SK-8		8 1/2	3 1/2	1 1/2	
	1919 45-B		8 1/2	3 1/2	1 1/2			1915 EE	8 1/2	9 1/2	M	2 1/2			1921 6-54 E		8 1/2	3 1/2	2 1/2			1919		8 1/2	3 1/2	1 1/2	
	1919 37A		8 1/2	3 1/2	1 1/2			1915 54	8 1/2	9 1/2	M	2 1/2			1921 13, 14		8 1/2	3 1/2	2 1/2			1915 Light-4		8 1/2	3 1/2	1 1/2	
	1920 45B		8 1/2	3 1/2	1 1/2			1915 55	8 1/2	9 1/2	M	2 1/2			1916		11					1921 SK L-4		8 1/2	3 1/2	1 1/2	
	1920 37A		8 1/2	3 1/2	1 1/2			1916 FF	8 1/2	9 1/2	M	2 1/2			1917		11					1918 70		8 1/2	3 1/2	1 1/2	
	1920 34C		8 1/2	3 1/2	1 1/2			1916 56	8 1/2	9 1/2	M	1 1/2			1919		11					1920 80		8 1/2	3 1/2	1 1/2	
Olympian	1918 45		7 1/2	3 1/2	1 1/2			2d Ser-57	8 1/2	9 1/2	M	1 1/2			1917		11					1916 1916		8 1/2	3 1/2	1 1/2	
	1919 45		7 1/2	3 1/2	1 1/2			1917 56	8 1/2	9 1/2	M	1 1/2			1921 40, 50		10 1/2	11	M			1914 D-6		8 1/2	3 1/2	1 1/2	
	1920 45		7 1/2	3 1/2	1 1/2			2d Ser-57	8 1/2	9 1/2	M	1 1/2			1916 C		8 1/2	9 1/2				1915 D-6		8 1/2	3 1/2	1 1/2	
Oneida Tr.	1921 All		5 1/2	2 1/2	2 1/2			1918 56	8 1/2	9 1/2	M	1 1/2			1917 C		8 1/2	9 1/2				1921 E		8 1/2	3 1/2	1 1/2	
Orleans	1921 A, B		5 1/2	2 1/2	2 1/2			1919 56	8 1/2	9 1/2	M	1 1/2			1919 9		9					1919		8 1/2	3 1/2	1 1/2	
	1921 C		5 1/2	2 1/2	2 1/2			1920 56-6	8 1/2	9 1/2	M	1 1/2			1920		9					1915		8 1/2	3 1/2	1 1/2	
Overland	1915 80		9 1/2	3 1/2	2 1/2			1921 56 Ser-6	8 1/2	9 1/2	M	1 1/2			Rush		9 1/2					1916		8 1/2	3 1/2	1 1/2	
	1915 81		9 1/2	3 1/2	2 1/2			1916 T'r Run	9 1/2						1917 D		8 1/2	9 1/2				1917		8 1/2	3 1/2	1 1/2	
	1915 82		9 1/2	3 1/2	2 1/2			1917 r.s. Ser-17	9 1/2						1918 E		8 1/2	9 1/2				1918 16-Valve		8 1/2	3 1/2	1 1/2	
	1916 75		7 1/2	3 1/2	1 1/2			1917 M							1915 6-30		8 1/2	9 1/2				1919		8 1/2	3 1/2	1 1/2	
	1916 75-B		7 1/2	3 1/2	1 1/2			1919 R							1915 SGV		7 1/2	8 1/2				1921 A, B		10		2 1/2	
	16-755		9 1/2	3 1/2	2 1/2			1914 38C-2	8 1/2						Sandow		1916 1 1/2 ton					1921 D, F		10		2 1/2	
	1917 85-6		9 1/2	3 1/2	2 1/2			1914 48B-2	8 1/2							1917 1 1/2 ton					1915 EC		8 1/2	9 1/2	2 1/2		
	1917 86		9 1/2	3 1/2	2 1/2			1914 66A-2	8 1/2							1918 1 1/2 ton					1915 SD		8 1/2	9 1/2	2 1/2		
	1918 83		9 1/2	3 1/2	2 1/2			1915 38C-3	8 1/2							1916 2 ton					1916 ED		8 1/2	9 1/2	2 1/2		
	1918 83-BOE		9 1/2	3 1/2	2 1/2			1915 48B-3	8 1/2							1917 2 ton					1916 SF-7		8 1/2	9 1/2	2 1/2		
	1919 85-4-6		9 1/2	3 1/2	2 1/2			1915 66A-3	8 1/2							1918 3 ton					1917 ED		8 1/2	9 1/2	2 1/2		
	1920 4		8 1/2	3 1/2	2 1/2			1916 38C-4	8 1/2							1917 3 ton					1917 SF-7		8 1/2	9 1/2	2 1/2		
	1920		8 1/2	3 1/2	2 1/2			1916 48B-4	8 1/2							1918 3 ton					1918 EG		8 1/2	9 1/2	2 1/2		
	1917 90		8 1/2	3 1/2	1 1/2			1916 66A-4	8 1/2							1918 25					1918 EH		8 1/2	9 1/2	2 1/2		
	1918 1200		9 1/2	3 1/2	2 1/2			1917 38C-4	8 1/2							1918 35					1918 SH		8 1/2	9 1/2	2 1/2		
	1918 90 P L D		8 1/2	3 1/2	2 1/2			1917 48B-4	8 1/2							1918 50					1919 EH		8 1/2	9 1/2	2 1/2		
	1918 85-6B		9 1/2	3 1/2	2 1/2			1917 66A-4	8 1/2							1915 A					1919 EG		8 1/2	9 1/2	2 1/2		
	1918 85-4		9 1/2	3 1/2	2 1/2			1918 48B-5	8 1/2							1915 Six		7 1/2	8 1/2			1919 SH		8 1/2	9 1/2	2 1/2	
	1918 88-6		9 1/2	3 1/2	2 1/2			1918 38C-5	8 1/2							1915 S					1920		9 1/2		1 1/2		
	1918 89-6		9 1/2	3 1/2	2 1/2			1918 66A-5	8 1/2							1916 S-2					1914 21		8 1/2	9 1/2	2 1/2		
	1919 90		7 1/2	3 1/2	1 1/2			1919 38C-4	8 1/2							1917 S-4		9			1915 E		9 1/2		2 1/2		
Ow-Mag.	1919 83-BOE		7 1/2	3 1/2	1 1/2			1920 All	9 1/2							1917 B-5		9			1915 F		9 1/2		2 1/2		
	1919 G-A		8 1/2	3 1/2	2 1/2			1921	9 1/2							1917 B-14		9			1915 C		9 1/2		2 1/2		
	1917 G-A		8 1/2	3 1/2	2 1/2			1915 75								17-38 El 4					1916 E		9 1/2		2 1/2		
	1916 G-B		8 1/2	3 1/2	2 1/2			1915 55								1918		7 1/2	8 1/2			1916 F		9 1/2		2 1/2	
	1917 G-B		8 1/2	3 1/2	2 1/2			1916 6-45								1919 Y-18-6cy					1916 R-4		9 1/2		2 1/2		
	1918 O-36		10 1/2	3 1/2	2 1/2			1917 6-45														1918 M-6		9 1/2		2 1/2	
	1918 M		10 1/2	3 1/2	2 1/2			1918 6-45														1918 M-7		9 1/2		2 1/2	
	1919 W-42		10 1/2	3 1/2	2 1/2			1914 50														1918 M-8		9 1/2		2 1/2	
	1920 W-42		10 1/2	3 1/2	2 1/2			1915 50														1918 M-9		9 1/2		2 1/2	
Packard	1914 138		11 1/2	M				1915 6-50	9	9 1/2	M	2 1/2										1918 S		9 1/2		2 1/2	
	1914 348		11 1/2	M				1916 651	9	9 1/2	M	2 1/2										1919 G		9 1/2		2 1/2	
	1914 238		9 1/2	10 1/2	M			1916 6-58	9	9 1/2	M	2 1/2										1920		9 1/2		2 1/2	
	1915 338		9 1/2	10 1/2	M			1917 6B	9 1/2	10 1/2	M	2 1/2										1919 E		9 1/2		2 1/2	
	1914 448		9 1/2	10 1/2	M			1918 6C	9 1/2	10 1/2	M	2 1/2										1916 16		8 1/2	3 1/2	1 1/2	
	1915 548		9 1/2	10 1/2	M			1918 6B	9 1/2	10 1/2	M	2 1/2								</							



CAR	Year	Model	LENSES			CAR	Year	Model	LENSES			CAR	Year	Model	LENSES							
			Opening in Rim	Outside Diameter	Spark Plug Size				Opening in Rim	Outside Diameter	Spark Plug Size				Opening in Rim	Outside Diameter	Spark Plug Size					
																		Headlights	Exhaust Pipe	Headlights	Exhaust Pipe	Headlights
White	1915	60-HP	7 3/4	8 1/2	1 1/2	Wichita Falls Wilcox Wil.K'ght	1915	...	...	...	Wichita Falls Wilcox Wil.K'ght	1915	...	...	...	Winton	1917	22	9 1/2	10 1/2	1 3/4	3
	1914	30-HP	7 3/4	8 1/2	1 1/2		1916	...	...	...		1915	21	9 1/4	10 1/4		1 3/4	...				
	1915	30-HP	7 3/4	8 1/2	1 1/2		1916	...	...	...		1915	21A	9 1/4	10 1/4		1 3/4	...				
	1916	30-HP	7 3/4	8 1/2	1 1/2		1914	K-17	...	...		...	1916	21A	9 1/4		10 1/4	1 3/4	...			
	1916	45-HP	9	10 1/2	2 1/2		1915	K-19	...	...		...	1917	21A	9 1/4		10 1/4	1 3/4	...			
	1917	gmSer17	9	10 1/2	2 1/2		1916	784	9 3/4	10 3/4		2 1/2	1915	22A	9 1/4		10 1/4	1 3/4	...			
	1918	16-Valve	8 3/4	9 3/4	2 1/2		1917	87	9 3/4	10 3/4		2 1/2	1916	22A	9 1/4		10 1/4	1 3/4	...			
	1918	GM	8 3/4	9 3/4	2 1/2		1917	88-4	9 3/4	10 3/4		2 1/2	1917	22A	9 1/4		10 1/4	1 3/4	...			
	1918	GMT	8 3/4	9 3/4	2 1/2		1917	88-8	9 3/4	10 3/4		2 1/2	1915	22	9 1/4		10 1/4	1 3/4	...			
	1919	45, H.P.	8 3/4	9 3/4	2 1/2		1918	6	9 1/4	10 3/4		2 1/2	1916	22	9 1/4		10 1/4	1 3/4	...			
	White Hickory Tr	1921	E.H.K	1 1/2	2 1/4		...	1918	88-4	9 1/4		10 3/4	2 1/2	1916	22A		9 1/4	10 1/4	1 3/4	...		
		1921	E.H.K	1 1/2	2 1/4		...	1918	88-8	9 1/4		10 3/4	2 1/2	1917	22A		9 1/4	10 1/4	1 3/4	...		
Wichita Falls Wilcox Wil.K'ght	1915	...	...	...	...	Wichita Falls Wilcox Wil.K'ght	1915	...	...	...	Wichita Falls Wilcox Wil.K'ght	1915	...	...	...	Witt-Will Wolv. Tr. Yale Zeit-Lam Zim'man	1921	P	9 1/2	10 1/2	1 3/4	2 1/2
	1916	...	...	...	...		1916	...	...	...		1915	21	9 1/4	10 1/4		1 3/4	...				
	1917	...	...	...	...		1917	...	...	...		1916	21A	9 1/4	10 1/4		1 3/4	...				
	1918	...	...	...	...		1918	...	...	...		1917	21A	9 1/4	10 1/4		1 3/4	...				
	1919	...	...	...	...		1919	...	...	...		1918	22	9 1/4	10 1/4		1 3/4	...				
	1920	...	...	...	...		1920	...	...	...		1919	25	9 1/4	10 1/4		1 3/4	...				
	1921	...	...	...	...		1921	...	...	...		1920	P	9 1/2	10 1/2		1 3/4	2 1/2				
	1922	...	...	...	...		1922	...	...	...		1921	P	9 1/2	10 1/2		1 3/4	2 1/2				
	1923	...	...	...	...		1923	...	...	...		1922	C	9 1/2	10 1/2		1 3/4	2 1/2				
	1924	...	...	...	...		1924	...	...	...		1923	C	9 1/2	10 1/2		1 3/4	2 1/2				
	1925	...	...	...	...		1925	...	...	...		1924	K	9 1/2	10 1/2		1 3/4	2 1/2				
	1926	...	...	...	...		1926	...	...	...		1925	K	9 1/2	10 1/2		1 3/4	2 1/2				

# Radiator Hose Sizes for Cars and Trucks from 1915 to 1921

CAR	Year	Model	RADIATOR HOSE SIZES		CAR	Year	Model	RADIATOR HOSE SIZES		CAR	Year	Model	RADIATOR HOSE SIZES		CAR	Year	Model	RADIATOR HOSE SIZES	
			Upper	Lower				Upper	Lower				Upper	Lower				Upper	Lower
Ace.....	1921	All	10	8	Chalmers	1915	24	1 3/4 x 6 1/4	1 1/4 x 1 1/4	Davis	1921	51 to 57	1 1/4	1 1/4	Gardner	1921	G	2 1/4	2 1/4
All-Amer.	1921	B-1, C1 1/2	2 x 11	2 x 13		1915	26	2 1/4 x 3	2 1/4 x 3 1/2	Day Elder	1921	AB	2 x 9	2 x 9 1/2	Gersich	1921	K	2 x 11	1 3/4 x 15
Allen.....	1915	38	2 1/4 x 8	1 1/4 x 6 1/4		1915	26-B	2 1/4 x 3	2 1/4 x 3 1/2		1921	C	2 x 10 1/2	1 3/4 x 9	Garford	1921	25-B	2 1/4 x 10	2 x 5 1/2
	1915	40	2 1/4 x 8	1 1/4 x 6 1/4		1915	29	1 3/4 x 6 1/4	1 1/4 x 1 1/4		1921	D	1 1/4 x 9	1 3/4 x 9		1921	68-D	2 1/4 x 13 1/2	1 3/4 x 17
	1915	33	2 x 6	1 1/4 x 6 1/4		1915	32(6-40)	2 1/4 x 3	2 1/4 x 3 1/2		1921	E	2 1/2 x 12 1/2	1 3/4 x 10		1921	70-H	2 1/4 x 13 1/2	1 3/4 x 17
	1915	34	2 x 6	1 1/4 x 6 1/4		1916	32(6-40)	2 1/4 x 3	2 1/4 x 3 1/2		1921	F	1 3/4 x 6 1/4	1 1/4 x 12		1921	77-D	2 1/4 x 14 1/2	1 3/4 x 18 1/2
	1915	35	2 x 6	1 1/4 x 6 1/4		1916	35A	2 1/4 x 5 1/4	2 1/4 x 3	Defiance..	1921	D, E	2 x 16	1 1/4 x 8 1/2	Giant	1921	15-A-1 1/2	2 1/4	2 1/4
	1916	37	2 x 6	1 1/4 x 6 1/4		1917	35	2 1/4 x 5 1/4	2 1/4 x 3	Dixie	1916	L	2 1/4 x 10 1/2	2 1/4 x 15		1921	16-2 T	1 1/4	1 1/4
	1917	37	2 x 6	1 1/4 x 6 1/4		1918	6-30	2 1/4 x 5 1/4	2 1/4 x 3	Flyer...	1917	L	2 1/4 x 10 1/2	2 1/4 x 15	Grant....	1921	17-3 1/2 T	1 1/2	1 1/2
	1915	36	2 x 6	1 1/4 x 6 1/4		1914	.....	1 3/4 x 8 1/2	1 3/4 x 13 1/2		1918	LS-35	2 1/4 x 10 1/2	2 1/4 x 15		1915	T-6	2 1/4 x 7 1/2	2 1/4 x 3 1/2
	1916	41	2 x 6	1 1/4 x 6 1/4		1915	.....	1 3/4 x 8 1/2	1 3/4 x 9 1/2		1921	HS-70	2	2		1916	U	2 1/4 x 7 1/2	2 1/4 x 3 1/2
	1921	43	3 x 6	2 1/4 x 2 1/4		1916	Ser 17	1 3/4 x 9 1/2	1 3/4 x 9 1/2	Dodge...	1915	.....	1 3/4 x 7	1 3/4 x 7 1/2		1917	K	2 1/4 x 7 1/2	2 1/4 x 3 1/2
Anderson	1921	Ser 40	1 1/4 x 10	1 1/4 x 9 1/2		1917	Ser 18	1 3/4 x 9 1/2	1 3/4 x 9 1/2		1916	.....	1 3/4 x 7	1 3/4 x 7 1/2		1918	K	2 1/4 x 7 1/2	2 1/4 x 3 1/2
Apperson	1915	4-40	1 1/4	1 1/4		1918	.....	1 3/4 x 9 1/2	1 3/4 x 9 1/2		1917	.....	1 3/4 x 7	1 3/4 x 7 1/2	Handley-Knight	1921	A	2 1/4	2 1/4
	1915	6-48	1 1/4	1 1/4		1921	NS 1921	1 3/4 x 11 1/2	1 3/4 x 9 1/2		1918	.....	1 3/4 x 7	1 3/4 x 7 1/2	Hanson	1921	54, 60	1 1/4	1 1/4
	1916	6-60	1 1/4	1 1/4		1915	H2	1 3/4 x 7	1 3/4 x 7 1/2		1919	.....	1 3/4 x 7	1 3/4 x 7 1/2	Six	1921	AA-1	2 x 4 1/2	2 x 3 1/2
	1916	8	1 1/4	1 1/4		1915	H4	1 3/4 x 7	1 3/4 x 7 1/2		1921	Tour	1 3/4 x 7	1 3/4 x 7 1/2	Harroun.	1917	AA-1	2 x 4 1/2	2 x 3 1/2
	1917	6-17	3	2 3/4		1915	H2 1/2	1 3/4 x 4 1/2	1 3/4 x 4 1/2	Dorria....	1915	H	1 3/4 x 4 1/2	1 3/4 x 4 1/2		1918	AA-2	2 x 4 1/2	2 x 3 1/2
	1917	8-17	3	1 3/4		1915	H3	1 3/4 x 7	1 3/4 x 4 1/2		1915	IA-4	1 3/4 x 4 1/2	1 3/4 x 4 1/2	Haynes...	1914	26	1 1/4 x 4 1/2	1 1/4 x 1 1/4
	1918	8-18	1 1/2	1 1/2		1916	Baby Gr	1 1/4 x 7	1 3/4 x 3 1/2		1916	IA-6	1 1/4 x 4 1/2	1 3/4 x 4 1/2		1914	27	1 1/4 x 4 1/2	1 1/4 x 1 1/4
	1921	8-21	3	2		1916	4-90	1 1/4 x 3 1/2	1 3/4 x 3 1/2		1916	IB-8	1 1/4 x 4 1/2	1 3/4 x 4 1/2		1914	28	1 1/4 x 4 1/2	1 1/4 x 1 1/4
Argonne...	1920	1	1 1/4	1 1/4		1917	Baby Gr.	1 1/4 x 4 1/2	1 3/4 x 3 1/2		1917	IC-6	1 1/4 x 4 1/2	1 3/4 x 4 1/2		1914	30	1 1/4 x 4 1/2	1 1/4 x 1 1/4
Armleder.	1921	KW3 1/2 T	2	1 1/4		1918	4 90	1 1/4 x 4 1/2	1 3/4 x 3 1/2		1918	6-80	1 1/4 x 4 1/2	1 3/4 x 3 1/2		1915	30	1 1/4 x 4 1/2	1 1/4 x 1 1/4
	1921	HW2 1/2 T	1 1/4	1 1/4		1918	FAB G	1 1/4 x 6 1/4	1 1/4 x 10 1/2	Dort....	1915	.....	2 1/4 x 7 1/2	2 1/4 x 11 1/2		1915	30	1 1/4 x 4 1/2	1 1/4 x 1 1/4
	1921	20-1 T	1 1/4	1 1/4		1918	D-5yl	1 1/4 x 6 1/4	1 1/4 x 10 1/2		1916	A	2 1/4 x 7 1/2	2 1/4 x 15 1/2		1916	33	1 1/4 x 8 1/2	1 1/4 x 8 1/2
Atco.....	1921	A	2	1 1/2		1921	6	1 1/4	1 1/4		1916	A	2 1/4 x 7 1/2	2 1/4 x 15 1/2		1916	34	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1921	B, B1	2	1 1/2		1921	S Six	1 1/2	1 1/2		1917	6	2 1/4 x 7 1/2	2 1/4 x 15 1/2		1916	35	1 1/4 x 8 1/2	1 1/4 x 8 1/2
Atterbury	1921	20R-14 T	1 1/4 x 8	1 1/4 x 10		1921	120 C	2 x 6 1/4	2 x 18 1/2		1917	9	2 1/4 x 7 1/2	2 1/4 x 15 1/2		1916	36	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1921	7CX24 T	1 1/4 x 5 1/2	1 1/4 x 8 1/2		1918	8-50	1 1/4 x 18	1 1/4 x 33 1/2		1918	11	2 1/4 x 7 1/2	2 1/4 x 15 1/2	Kissel	1915	4-36	1 1/4 x 8 1/2	1 1/4 x 11 1/2
	1921	7D34 T	1 1/4 x 8	1 1/4 x 10		1918	5-60	2 x 18 1/2	1 1/4 x 33 1/2	Drum-	1918	.....	1 1/4 x 8	2 1/4 x 6	Kar....	1915	6-42	1 1/4 x 8 1/2	1 1/4 x 8 1/2
Autocar...	1921	XXI-F, G	1 1/4	1 1/4		1918	870	1 1/4 x 21 1/2	1 1/4 x 33 1/2	mond	1919	.....	1 1/4 x 8	2 1/4 x 6		1916	4-32	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1921	XXVI-B	1 1/4	1 1/4		1921	870	1 1/4 x 21 1/2	1 1/4 x 33 1/2	Dupont..	1921	A	2 1/4	1 1/4		1916	4-40	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1921	XXVI-B	1 1/4	1 1/4		1921	22-24T	1 1/4 x 7	1 1/4 x 10 1/2	Duty...	1921	21	2 1/4 x 7	2 x 18		1917	40	1 1/4 x 8 1/2	1 1/4 x 8 1/2
Beggs...	1921	20 T	1 1/4 x 5	1 1/4 x 11 1/2		1917	A	1 1/4 x 7	1 1/4 x 10 1/2	Elgin...	1918	6-Ser 17	1 1/4 x 8 1/2	1 1/4 x 17		1917	33	1 1/4 x 8 1/2	1 1/4 x 8 1/2
Biddle....	1916	C	2 x 7 1/2	1 1/4 x 7 1/2		1918	E	1 1/4 x 3	1 1/4 x 10 1/2		1918	A	1 1/4 x 8 1/2	1 1/4 x 17		1917	39	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1916	D	2 x 7 1/2	1 1/4 x 7 1/2		1921	C, D, E, H, C, S	1 1/4	1 1/4		1921	K-1	1 1/4 x 7 1/2	1 1/4 x 15 1/2		1917	44	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1917	D-17	2 x 7 1/2	1 1/4 x 7 1/2		1921	21-6-40	1 1/4	1 1/4	Erie.....	1921	A-2 1/2 T	2	1 1/4		1918	38	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1917	H-17	2 x 7 1/2	1 1/4 x 7 1/2		1915	.....	1 1/4 x 6	1 1/4 x 14	Essex...	1921	A	2 1/4 x 4	2 1/4 x 14 1/2		1918	39	1 1/4 x 8 1/2	1 1/4 x 8 1/2
	1918	D	2 x 7 1/2	1 1/4 x 7 1/2		1916	CE-30	2 1/4 x 8	2 1/4 x 15	Ferris...	1921	C-20	1 1/4 x 13	1 1/4 x 11	Higade	1921	A-18	2 1/4	2 1/4
	1918	H	2 x 7 1/2	1 1/4 x 7 1/2		1916	CE-30	2 1/4 x 8	2 1/4 x 15	Ford.....	1915	Split'F	2 x 3 1/2	1 3/4 x 23 1/2		1914	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Bour-	1921	21	2	1 1/4		1917	CE-35	2 1/4 x 8	2 1/4 x 15		1916	GD	2 x 3 1/2	1 3/4 x 23 1/2		1915	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Davis.	1921	O2	1 1/4	1 1/4		1918	35	2 x 15	2 x 15		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1914	6-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Brewster	1921	F	1 1/4 x 11	1 1/4 x 13		1918	35	2 x 15	2 x 15		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1915	6-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Brinton.	1914	B-15	1 1/4 x 8	1 1/4 x 8	Cunning-	1914	.....	1 1/4 x 5 1/2	1 1/4 x 3 1/2	ham....	1914	.....	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1916	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Briscoe...	1915	15	1 1/4 x 5	1 1/4 x 5		1914	.....	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1914	.....	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1917	5-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1916	4-38	2 1/4 x 8 1/2	1 1/4 x 5 1/2		1915	V	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1916	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1916	8-38	2 1/4 x 8 1/2	1 1/4 x 5 1/2		1916	V	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1917	5-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1917	4-24	2 x 5 1/2	2 x 5 1/2		1917	V-2 Ser	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1917	5-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1918	24	2 x 5 1/2	2 x 5 1/2		1918	V	1 1/4 x 5 1/2	1 1/4 x 3 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1917	5-54	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1918	T-24	2 x 5 1/2	2 x 5 1/2		1921	D-19	1 1/4 x 6	1 1/4 x 8 1/2	Daniel...	1921	D-19	1 1/4 x 6	1 1/4 x 8 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1921	4-34	2 x 5	2 x 5	Davis....	1915	38A	2 x 10	2 x 12		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Cadillac.	1913	13	1 1/4 x 7 1/2	1 1/4 x 10		1915	38B	2 x 10	2 x 12		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1914	.....	1 1/4 x 7 1/2	1 1/4 x 10		1915	38C	2 x 10	2 x 12		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1915	All	1 1/4 x 8 1/2	1 1/4 x 10 1/2		1916	6F	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1916	All	1 1/4 x 8 1/2	1 1/4 x 10 1/2		1916	6-G	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1917	All	1 1/4 x 8 1/2	1 1/4 x 10 1/2		1916	6-G	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1918	Type 57	1 1/4 x 7 1/2	1 1/4 x 6		1916	6-G	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1921	59	1 1/4	1 1/4		1917	6H	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
Capitol...	1921	HKM	1 1/4	1 1/4		1917	6H	1 1/4 x 11	1 1/4 x 12 1/2		1916	Leoce	2 x 3 1/2	1 3/4 x 23 1/2		1918	6-40	1 1/4 x 6 1/4	1 1/4 x 6 1/4
	1921																		



CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		CAR	RADIATOR HOSE SIZES		
	Year	Model		Upper	Lower		Year	Model		Upper	Lower		Year	Model		Upper	Lower		Year	Model	Upper
Marmon...	1921 B	1 1/2 x 3/4	1 1/2 x 1 1/4	Oldsmobile	1917 45	1 1/2 x 1 1/4	1 1/2 x 3/4	Pierless...	1915 EE	1 1/2 x 1 1/4	1 1/2 x 1 1/4	Revere...	1918 B	1 1/2 x 3/4	1 1/2 x 3/4	Stutz...	1917 R-4	2 1/2 x 1 1/4	1 1/2 x 1 1/4		
	1916 34	1 1/2 x 3/4	1 1/2 x 3/4		1918 37	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1915 54	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1918 C	1 1/2 x 3/4	1 1/2 x 3/4	Templar...	1918 445	1 1/2 x 3/4	1 1/2 x 3/4		
	1917 34	1 1/2 x 3/4	1 1/2 x 3/4		1918 45	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1915 55	1 1/2 x 1 1/4	1 1/2 x 1 1/4	Roamer...	1921 4-75E	1 1/2 x 3/4	1 1/2 x 3/4		1921 445	1 1/2 x 3/4	1 1/2 x 3/4		
Merced...	1914 35-G	1 1/2 x 3/4	1 1/2 x 3/4	Oneida, Tr	1918 45-A	1 1/2 x 1 1/4	1 1/2 x 3/4		1916 56	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1921 6-54E	1 1/2 x 3/4	1 1/2 x 3/4	Traffic...	1921 C	2 x 10 1/2	2 x 10 1/2		
	1914 H	1 1/2 x 3/4	1 1/2 x 3/4	Orleans...	1921 A	1 1/2 x 1 1/4	1 1/2 x 3/4		2d Ser-57	1 1/2 x 3/4	1 1/2 x 3/4	Rock Falls	1921 13, 14	1 1/2 x 3/4	1 1/2 x 3/4	Triangle...	1921 AA	2 x 17	2 x 17		
	1914 M	1 1/2 x 3/4	1 1/2 x 3/4	Overland...	1921 A, B, C	2 O.D.	1 1/2 O.D.		1917 56	1 1/2 x 3/4	1 1/2 x 3/4	Rolls...				Tulsa...	1918 D-1	2 1/2 x 10	2 1/2 x 10		
	1914 35K	1 1/2 x 3/4	1 1/2 x 3/4		1915 80	1 1/2 x 3/4	1 1/2 x 3/4		2d Ser-57	1 1/2 x 3/4	1 1/2 x 3/4	Royce...	1921 40, 50	1 1/2 x 3/4	1 1/2 x 3/4		1919 D-1	2 1/2 x 10	2 1/2 x 10		
	1914 350	1 1/2 x 3/4	1 1/2 x 3/4		1915 81	1 1/2 x 3/4	1 1/2 x 3/4		1918 56	1 1/2 x 3/4	1 1/2 x 3/4	Sayers Six	1921 D P	1 1/2 x 3/4	1 1/2 x 3/4		1921 E, 1-2-3	2 x 1	2 x 1		
	1915 22-70	1 1/2 x 3/4	1 1/2 x 3/4		1915 82	1 1/2 x 3/4	1 1/2 x 3/4		1921 56 Ser-6	1 1/2 x 3/4	1 1/2 x 3/4	Scrimps	1921 B	1 1/2 x 3/4	1 1/2 x 3/4	Twin City	1921 A, B	1 1/2 x 3/4	1 1/2 x 3/4		
	1916 22-72	1 1/2 x 3/4	1 1/2 x 3/4		1916 75	1 1/2 x 3/4	1 1/2 x 3/4		1914 38C-2	1 1/2 x 3/4	1 1/2 x 3/4	Booth...	1918 A	1 1/2 x 3/4	1 1/2 x 3/4	F.W.D.	1921 A, B	1 1/2 x 3/4	1 1/2 x 3/4		
	1917 32-73	1 1/2 x 3/4	1 1/2 x 3/4		1917 85-6	1 1/2 x 3/4	1 1/2 x 3/4		1914 48B-2	1 1/2 x 3/4	1 1/2 x 3/4	Seneca...	1921 35	2 1/2 x 13 1/2	2 1/2 x 13 1/2	Velie...	1915 15-Ser-15	1 1/2 x 3/4	1 1/2 x 3/4		
	1918 22-74	1 1/2 x 3/4	1 1/2 x 3/4		1916 83	2 1/2 x 4 1/2	2 1/2 x 4 1/2		1914 66A-2	2 1/2 x 4 1/2	2 1/2 x 4 1/2	Skelton...	1916 F-8	1 1/2 x 7 1/2	1 1/2 x 7 1/2		1916 22-Ser-22	1 1/2 x 9 1/2	1 1/2 x 9 1/2		
Meteor Pa	1921 R, RR	1 1/2 x 3/4	1 1/2 x 3/4	Ow-Mag...	1917 90	1 1/2 x 3/4	1 1/2 x 3/4		1915 38C-3	1 1/2 x 3/4	1 1/2 x 3/4	Standard	1917 F-8	1 1/2 x 7 1/2	1 1/2 x 7 1/2		1916 B well-27	1 1/2 x 9 1/2	1 1/2 x 9 1/2		
Mets.....	1921 1921	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1918 90 P L D	1 1/2 x 3/4	1 1/2 x 3/4		1915 48B-3	1 1/2 x 3/4	1 1/2 x 3/4		1917 F	1 1/2 x 7 1/2	1 1/2 x 7 1/2		1917 B well-27	1 1/2 x 9 1/2	1 1/2 x 9 1/2		
Mitchell...	1915 L-4	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1918 M-25	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1915 68A-3	2 1/2 x 3/4	2 1/2 x 3/4		1917 G	1 1/2 x 7 1/2	1 1/2 x 7 1/2		1916 B well-28	3 1/2 x 9 1/2	1 1/2 x 1 1/4		
	1915 L-6	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1919 W-42	2 x 5 1/2	1 1/2 x 1 1/4		1918 38C-4	2 x 1	1 1/2 x 3/4		1918 G	1 1/2 x 7 1/2	1 1/2 x 7 1/2		1917 B well-28	1 1/2 x 9 1/2	1 1/2 x 9 1/2		
	1917 C-42	2 x 7 1/2	1 1/2 x 1 1/4	Packard...	1914 138	1 1/2 x 3/4	1 1/2 x 1 1/4		1918 48B-4	2 1/2 x 3/4	2 1/2 x 3/4	Stanwood	1921 A-21	1 1/2 x 3/4	1 1/2 x 3/4		1918 38	1 1/2 x 9 1/2	1 1/2 x 10 1/2		
	1917 D-40 Sp	2 x 8 1/2	1 1/2 x 1 1/4		1914 348	1 1/2 x 3/4	1 1/2 x 1 1/4		1918 66A-4	2 1/2 x 3/4	2 1/2 x 3/4	Stearns...	1914 SK-4	1 1/2 x 3/4	1 1/2 x 3/4	Walker-	1921 B	2 x 1	1 1/2 x 3/4		
	1918 C-42	2 x 8 1/2	1 1/2 x 1 1/4		1914 338	1 1/2 x 3/4	1 1/2 x 1 1/4		1917 38C-4	2 x 1	1 1/2 x 3/4		1914 SK-6	1 1/2 x 3/4	1 1/2 x 3/4	Johnson	1921 B	2 x 1	1 1/2 x 3/4		
	1918 D-40	2 x 8 1/2	1 1/2 x 1 1/4		1915 338	1 1/2 x 3/4	1 1/2 x 1 1/4		1917 48B-4	2 x 1	1 1/2 x 3/4		1915 SK L-4	1 1/2 x 3/4	1 1/2 x 3/4	Watson...	1921 B	1 1/2 x 10 1/2	1 1/2 x 8		
	1921 F-40	1 1/2 x 7 1/2	1 1/2 x 5 1/2		1914 448	1 1/2 x 3/4	1 1/2 x 1 1/4		1917 66A-4	2 1/2 x 3/4	2 1/2 x 3/4		1915 SK L-4	1 1/2 x 3/4	1 1/2 x 3/4	Wasp...	1921 211	1 1/2 x 3/4	1 1/2 x 3/4		
	1921 F-42	1 1/2 x 7 1/2	1 1/2 x 5 1/2		1915 548	1 1/2 x 3/4	1 1/2 x 1 1/4		1918 48B-5	2 1/2 x 3/4	2 1/2 x 3/4		1916 SK L-4	1 1/2 x 3/4	1 1/2 x 3/4	Westcott...	1915 J-35	1 1/2 x 18	1 1/2 x 10		
Moline...	1915 MK-50	2 1/2 x 5 1/2	2 1/2 x 7 1/2		212	1 1/2 x 3/4	1 1/2 x 3/4		1915 55	1 1/2 x 1 1/4	1 x 8		1917 SK L-4	1 1/2 x 3/4	1 1/2 x 3/4		1915 U-50	1 1/2 x 12	1 1/2 x 5		
	1915 MK-40	2 1/2 x 5 1/2	2 1/2 x 7 1/2		6-36	1 1/2 x 3/4	1 1/2 x 3/4		1916 6-45	1 1/2 x 10	1 x 7		1918 4	1 1/2 x 3/4	1 1/2 x 3/4		1916 41	1 1/2 x 10	1 1/2 x 8		
	1916 MK-40	2 1/2 x 5 1/2	2 x 8 1/2		6-48	1 1/2 x 3/4	1 1/2 x 3/4		1917 6-45	1 1/2 x 10	1 x 7		1918 8	2 1/2 x 10	2 1/2 x 10		1916 41	1 1/2 x 10	1 1/2 x 8		
	1917 MK-50	2 1/2 x 5 1/2	2 1/2 x 11		1918 3-25	1 1/2 x 3/4	1 1/2 x 3/4		1918 6-45	1 1/2 x 10	1 x 6 1/2		1918 8	2 1/2 x 10	2 1/2 x 10		1916 51	1 1/2 x 10	1 1/2 x 8		
	1918 40C	2 1/2 x 5 1/2	2 x 6 1/2		1918 3-35	1 1/2 x 3/4	1 1/2 x 3/4		1915 6-50	1 1/2 x 6	1 1/2 x 3 3/4		1917 SK-8	2 1/2 x 10	2 1/2 x 10		1916 51	1 1/2 x 10	1 1/2 x 8		
	1918 50	2 1/2 x 5 1/2	2 1/2 x 11	Paige...	1914 25	1 1/2 x 3/4	1 1/2 x 3/4		1916 651	1 1/2 x 6	1 1/2 x 3 3/4		1917 SK-8	2 1/2 x 10	2 1/2 x 10		1917 S-17	1 1/2 x 7 1/2	1 1/2 x 1		
Monitor...	1921 B50, 51, 52	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1914 36	1 1/2 x 3/4	1 1/2 x 3/4		1917 6B	1 1/2 x 10	1 1/2 x 4 1/2	Stephan...	1921 SK L-4	1 1/2 x 6 1/2	1 1/2 x 9		1918 13	1 1/2 x 7 1/2	1 1/2 x 1		
Moon...	1917 6-43	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1914 25	1 1/2 x 3/4	1 1/2 x 3/4		1918 6B	1 1/2 x 10	1 1/2 x 4 1/2	Stevens-	1921 SK L-4	1 1/2 x 6 1/2	1 1/2 x 9	White	1921 C-38	1 1/2 x 4	1 1/2 x 4		
	1918 6-38	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1915 25	1 1/2 x 3/4	1 1/2 x 3/4		1918 6B	1 1/2 x 10	1 1/2 x 4 1/2		1918 70	2 1/2 x 11 1/2	2 1/2 x 17 1/2	Hickory	1921 C-48	1 1/2 x 9	1 1/2 x 2 1/2		
	1918 6-68	1 1/2 x 1 1/4	1 1/2 x 1 1/4		1916 6-38	1 1/2 x 3/4	1 1/2 x 3/4		1921 6-D	1 1/2 x 5 1/2	1 1/2 x 8 1/2	Duryea	1921 E	3 1/2 x 35 1/2	1 1/2 x 4 1/2		1921 E-T	2 x 11	1 1/2 x 8		
	1921 6-48, 6-68	1 1/2 x 10	1 1/2 x 12		1916 6-46	1 1/2 x 3/4	1 1/2 x 3/4		1918 6B	1 1/2 x 10	1 1/2 x 4 1/2	Stoughton	1921 A, B	1 1/2 x 3/4	1 1/2 x 3/4		H-1 1/4				
Moore...	1919 30-C	3 x 9 1/2	3 x 9 1/2		1917 J-6-17	1 1/2 x 3/4	1 1/2 x 3/4		1921 A-20	2 O-D.	2 O-D.		1921 D, F	2 x 2	2 x 2	Wil.K'ght	1921 K-2 1/2 T	1 1/2 x 9	1 1/2 x 8		
Mutual Tr.	1921 2A, 2AP	1 1/2 x 3/4	1 1/2 x 3/4		1917 K-6-17	1 1/2 x 3/4	1 1/2 x 3/4		Ranger...	2 O-D.	2 O-D.	Stud'bak'r	1915 E	1 1/2 x 3/4	1 1/2 x 3/4		1921 K-2 1/2 T	1 1/2 x 9	1 1/2 x 8		
Nash Six.	1918 681	1 1/2 x 7	1 1/2 x 1 1/4		1918	1 1/2 x 3/4	1 1/2 x 3/4		R. & V....	2 O-D.	2 O-D.		1915 ED	1 1/2 x 3/4	1 1/2 x 3/4		16-7 784	2 1/2 x 3 1/2	2 1/2 x 7 1/2		
	1918 671	1 1/2 x 7	1 1/2 x 1 1/4		1921 K-6-17	1 1/2 x 3/4	1 1/2 x 3/4		Reliance...	2 O-D.	2 O-D.		1915 SD	1 1/2 x 3/4	1 1/2 x 3/4		16-7 88-4	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
National	1921 SerBBSex	1 1/2 x 3/4	1 1/2 x 3/4		1918	1 1/2 x 3/4	1 1/2 x 3/4		Reo.....	2 O-D.	2 O-D.		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		16-7 89-8	2 x 5 1/2	2 x 5 1/2		
Nelson & Le Mnoo	1921 F1 1/2, 2 1/2	1 1/2 x 3/4	1 1/2 x 3/4		1921 6-42	1 1/2 x 3/4	1 1/2 x 3/4			1 1/2 x 3/4	1 1/2 x 3/4		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		17-8 6	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
	1921 F1 1/2, 2 1/2	1 1/2 x 3/4	1 1/2 x 3/4		1921 6-66	1 1/2 x 3/4	1 1/2 x 3/4			1 1/2 x 3/4	1 1/2 x 3/4		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		17-8 6	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
	1921 F1 1/2, 2 1/2	1 1/2 x 3/4	1 1/2 x 3/4		1921 6-55-E	1 1/2 x 3/4	1 1/2 x 3/4			1 1/2 x 3/4	1 1/2 x 3/4		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		17-8 6	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
Noble Tr.	1921 A-21	1 1/2 x 3/4	1 1/2 x 3/4	Pan Am...	1921 A	2 x 7 1/2	2 x 11			1 1/2 x 3/4	1 1/2 x 3/4		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		17-8 6	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
Norwalk.	1921 4-30KS	1 1/2 x 3/4	1 1/2 x 3/4	Parker...	1921 F J-20	1 1/2 x 3/4	1 1/2 x 3/4			1 1/2 x 3/4	1 1/2 x 3/4		1916 ED	1 1/2 x 3/4	1 1/2 x 3/4		17-8 6	2 1/2 x 3 1/2	2 1/2 x 5 1/2		
N'way Tr.	19																				







Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	36x6	38x7
Blekre Tire & Rubber Co., St. Paul, Minn. Nov. 1, 1921	7,500/Rbd miles N.S. G.T. R.T. 10,000 miles Cord N.S.	13.60 14.20 2.20 2.40 24.60	16.30 16.90 2.50 2.95 32.55	20.05 20.65 3.00 3.15 32.55	22.80 23.50 3.45 3.70 32.55	26.85 27.45 3.60 3.90 40.60	28.20 28.95 3.70 4.05 41.70	28.80 29.55 3.80 4.20 42.90	36.10 36.85 4.60 4.90 45.75	37.15 37.80 4.90 5.10 46.95	38.35 39.15 4.95 5.25 48.25	40.20 40.90 5.20 5.40 49.35	40.80 41.65 5.25 5.50 50.55	44.55 45.40 5.65 6.00 57.10	47.10 48.00 5.95 6.45 59.95	50.10 51.00 6.10 6.85 62.65			
Braender Rubber & Tire Co., Rutherford, N.J. Jan. 16, 1922	"Bull Dog" Fabric Cord G.T. Cord R.T.	c13.00 2.10 2.40	c13.75 2.25 2.80	d19.15 2.55 2.95	e21.35 3.10 3.45	d24.95 3.20 3.65	d26.30 3.35 3.80	d26.85 3.45 4.00	d33.40 4.05 4.65	d42.85 4.20 4.75	d43.90 4.25 4.90	d45.20 4.30 5.10	d46.15 4.55 5.30	d52.15 5.00 5.70	d54.75 5.20 6.00	d57.60 5.45 6.35	d78.55 8.50 10.50	d113.85 11.60 14.00	
Brunswick-Balke-Collender Co., Chicago, Ill. August 1, 1922.	Suburban Fbr. B. B. C. Fbr. Cord Flat Tr Suburban T. G. T.	11.05 11.30 1.70 2.45	13.05 16.50 1.80 2.90	16.50 22.95 2.00 3.05	18.75 26.45 2.20 3.20	21.45 29.15 3.30 3.40	22.60 30.05 3.40 3.60	22.95 30.85 3.50 3.60	28.10 37.70 4.20 4.20	29.25 38.55 4.35 4.45	30.50 39.50 4.45 4.50	30.50 40.70 4.50 4.70	30.50 41.55 4.55 4.85	30.50 46.95 5.85 6.20	30.50 49.30 6.00 6.55	30.50 51.85 6.35 6.90	30.50 80.45 9.90	30.50 113.85 14.30	
Butler Bros. 426 Randolph St., Chicago, Ill.	(7,500) "Universal" Cord N.S. (6,000) "Gorilla" N.S. Rbd. G.T. R.T.	c 6.50 e 6.25 1.10 1.30	e 7.95 e 7.50 1.20 1.45	d19.85 d10.55 1.65 1.80	e11.50 e11.00 1.95 2.20	d25.25 d13.65 2.00 2.35	d26.00 d14.15 2.10 2.45	d26.75 d15.55 2.20 2.50	d30.75 d18.35 2.45 2.85	d32.25 d19.35 2.60 3.00	d32.75 d20.35 2.75 3.25	d32.75 d21.50 2.95 3.50	d32.75 d22.00 3.10 3.70	d39.75 *24.65 *24.25 3.65	d39.75 *26.00 3.75 4.25				
Canton-Blackstone Co., Youngstown, O. June 19, 1922	Ribbed N.S. Cord N.S. Canton "Blackstone" T	c12.00 c12.35 2.00	c13.75 d20.00 2.25	d19.15 d27.25 2.55	e21.35 d30.50 3.10	d24.95 d33.45 3.25	d26.30 d34.45 3.35	d26.85 d35.35 3.50	d33.40 d43.25 4.65	d42.85 d44.20 4.80	d43.90 d45.30 5.00	d45.20 d46.65 5.15	d46.15 d47.60 5.30	d52.15 d53.80 5.60	d54.75 *56.50 5.90	d57.60 *59.40 6.20	d78.55 10.00	d113.85 13.55	
Carlisle Tire Corp., Stamford, Conn. June 1, 1922	Lightning Tread Tubes	2.75	3.10	3.40	3.80	4.05	4.25	4.40	5.10	5.30	5.40	5.60	5.90	6.30	6.65	6.90			
Carlisle Tire & Rubber Co., Carlisle, Pa. May 10, 1922	"Carmojon" G.T. R.T. B.T. "Carmojon De Luxe" R. & G.T.	1.80 1.95 2.20 2.30	2.00 2.15 2.50 2.70	2.10 2.25 2.70 2.90	2.50 2.70 3.20 3.30	2.60 2.80 3.40 3.50	2.65 2.85 3.45 3.60	2.70 2.90 3.50 3.70	3.15 3.40 4.00 4.40	3.20 3.45 4.20 4.60	3.25 3.55 4.25 4.70	3.30 3.60 4.30 4.80	3.35 3.65 4.40 4.90	3.55 3.85 4.70 5.30	3.70 4.00 4.90 5.50	3.80 4.15 5.05 5.70			
Century Rubber Works April 1, 1922 Cicero, Ill.	"Atlas" N.S. Fibre "Century" N.S. Fbr. N.S. Cord Tubes	9.85 10.95 1.90	12.35 13.75 2.25	17.25 19.15 2.55	19.22 21.35 3.10	22.45 24.95 3.20	23.65 26.30 3.35	24.15 26.85 3.50	41.90 42.85 4.05	42.85 43.90 4.20	43.90 45.20 4.25	45.20 46.65 4.30	46.65 48.00 4.40	52.15 53.80 5.00	54.75 56.50 5.20	57.60 59.40 5.45			
Cleveland Rubber Corp., Cleveland, O., Dec. 12, 1921	Cord N.S. R.T.	c22.00 3.35	d26.70 3.50		d33.60 4.25	d34.70 4.30	d35.70 4.40	d44.15 5.25	d45.20 5.40	d46.35 5.55	d47.70 5.80		d55.00 6.60	d57.75 6.80	d60.75 7.20				
Climax Rubber Co., Columbus, O. Jan. 16, 1922	G.T. R.T.	1.75 2.25	1.85 2.35	2.20 2.75	2.50 2.90	3.00 3.35	3.15 3.65	3.30 3.75	3.40 3.90	4.00 4.55	4.10 4.65	4.20 4.85	4.25 5.05	4.50 5.25	4.90 5.60	5.25 5.95	5.35 6.25		
Coast Tire & Rubber Co., Oakland, Calif. Aug. 10, 1922	Scout 49 N.S. "Coast Ranger" Cord N.S. N.S. Cord N.S. Heavy G. T.	c 9.49 e12.75 2.40	c10.49 e14.95 2.80		c22.15 e20.65 3.10	d26.15 d28.80 3.50	d27.15 d30.40 3.70	d28.15 d31.45 3.85	d39.60 d40.00 4.75	d39.90 d41.50 4.90	d41.50 d42.40 5.10	d42.40 d44.00 5.25	d44.00 d45.30 5.40	d50.30 d51.60 5.70	d52.90 d54.20 6.00	d80.90 d82.20 6.30			
Columbia Tire & Rubber Co., Mansfield & Columbiana, Ohio, Aug. 7, 1922 Aug. 7, 1922	"Columbia" N.S. "Columbia" Cord N.S. "Apex" Fbr. G.T. R.T.	e10.25 e14.65 7.85 1.95 2.40	e10.90 e14.65 8.75 2.30 2.80	d16.30 d22.95 2.95 3.10 3.50	e20.65 d26.45 3.10 3.20 3.60	d21.20 d29.15 3.20 3.30 3.80	d22.35 d30.05 3.30 3.50 4.00	d22.85 d30.85 3.40 3.85 4.50	d37.70 d38.55 4.65 4.85	d39.50 d40.70 4.95 5.15	d41.55 d42.40 5.25 5.45	d46.95 d48.00 5.55 5.75	d49.30 d50.30 5.85 6.05	d51.85 d52.90 6.15 6.35	d57.60 d59.40 6.55 6.75				
Columbus Tire & Rubber Co., Columbus, O. April 25, 1922	N.S. Cord N.S. & Rbd. G.T. R.T.	c12.35 e19.95 2.10	c14.75 e25.50 2.45		c22.00 d32.40 3.20	d25.45 d33.40 3.35	d26.80 d34.25 3.50	d27.35 d34.25 3.60	d41.90 d42.85 4.05	d42.85 d43.90 4.20	d43.90 d45.20 4.30	d45.20 d46.15 4.55	d52.15 d53.80 5.00	d54.75 d56.50 5.20	d57.60 d59.40 5.45				
Combination Rubber Mfg. Co., Bloomfield, N. J. Aug. 15, 1922 "Viking"	Fabric Cord G.T. R.T.	e10.70 e16.20 1.90 2.40	c14.90 e22.95 2.25 2.80	d17.75 d22.95 2.55 2.95	e20.65 d28.45 3.10 3.45	d22.90 d29.15 3.20 3.65	d24.10 d30.05 3.30 3.80	d24.60 d30.85 3.50 4.00	d30.65 d37.70 4.65 4.75	d31.70 d38.55 4.90 5.10	d32.65 d39.50 5.20 5.40	d33.55 d40.70 5.50 5.70	d37.60 d46.95 6.00 6.30	d39.30 d49.30 6.50 6.80	d42.50 d51.85 7.00 7.30	d44.50 d54.20 7.50 7.80	d74.40 8.50 9.40	13.55 14.90	
Continental Rubber Works, Erie, Pa. Aug. 1, 1922	"Vitalio" Cord Fabric G.T. R.T. Extra Heavy R.T. Dbl. Weight G.T.	c11.40 1.80 2.30 2.75	c17.40 2.25 2.80 3.35	d22.95 2.55 2.95 3.55	d26.45 3.10 3.45 4.15	d29.15 3.20 3.60 4.25	d30.05 3.30 3.80 4.35	d30.85 3.50 4.00 4.65	d37.70 4.65 4.90 5.05	d38.55 4.95 5.20 5.25	d39.50 5.10 5.40 5.45	d40.70 5.25 5.50 5.70	d46.95 6.00 6.35 6.85	d49.30 6.50 6.85 7.20	d51.85 7.00 7.35 7.60	d57.60 8.50 9.40			
Cord Tire Corp., Chester, W. Va., Aug. 1, 1922	"Superior" Cord N.S.	c16.95	d25.50	d31.50	d32.95	d33.95	d34.90	d38.50	d39.45	d40.40	d41.60		d50.30	d52.60					
Corona Cord Tire Co., East Butler, Pa. Aug. 25, 1922	Oversize N.S. G.T. R.T.	c56.55 2.80 2.25	c55.95 2.95 2.55	d22.95 3.45 3.10	d26.05 3.65 3.20	d29.55 3.80 3.35	d30.05 4.00 3.50	d35.85 4.65 4.05	d37.75 4.85 4.20	d38.55 5.10 4.25	d39.50 5.40 4.30	d40.70 5.70 4.55	d46.95 6.00 5.00	d49.30 6.50 5.20	d51.85 7.00 5.45				
Cumberland Tire & Rubber Co., Louisville, Ky. Dec. 1, 1921	Cord N.S. Cord R.T. Cord G.T.	e18.00 2.80 2.25	d25.50 2.55 3.10	d29.40 2.90 3.30	d32.40 3.45 3.75	d33.45 3.55 3.95	d34.25 3.70 4.10	d41.90 4.50 5.00	d42.85 4.65 5.15	d43.90 4.75 5.30	d45.20 4.90 5.50	d46.15 5.00 5.60	d52.15 5.55 6.15	d54.75 5.80 6.40					
Cupples Co., St. Louis, Mo. July 19, 1922	F. S. Cord N.S. Oversize Cords G.T. R.T.	c11.50 e15.20 2.40 1.90	c12.50 e21.85 2.80 2.25	d16.15 d21.85 2.95 2.55	e15.20 d24.30 3.45 3.10	d20.45 d25.20 3.70 3.20	d21.85 d26.40 3.80 3.35	d22.25 d27.45 4.00 3.50	d24.30 d33.55 4.65 4.05	d25.20 d34.45 4.75 4.20	d26.40 d35.55 4.90 4.30	d27.45 d36.70 5.10 4.55	d37.60 d42.10 5.30 4.80	d39.30 d43.90 5.50 5.00	d42.50 d45.90 5.70 5.25				
Curtis Tire & Rubber Co., Rochester, N. Y. Nov. 21, 1921	Cord Rbd. & N.S. Fabric N.S. G.T. R.T.	12.60 2.40 3.00	17.65 3.00 3.45	20.25 3.25 3.75	23.75 3.85 4.20	27.55 4.05 4.45	28.40 4.15 4.65	29.00 4.40 4.80	43.95 5.10 5.60	45.90 5.25 5.80	46.95 5.35 5.95	48.40 5.55 6.15	50.25 5.75 6.45	53.95 6.30 6.95	55.90 6.65 7.35	58.45 7.00 7.70	84.80 10.05 11.20		
Dayton Airless Tire Co., Dayton, O., Feb. 1, 1922	P. or Rbd. N.S.	18.25 19.25	22.00 22.75																
Dayton Rubber Mfg. Co., Dayton, O. Dec. 5, 1921	P. N.S. Cord N.S. G.T. R.T.	c10.20 e10.80 2.40 2.70	c12.75 e13.50 2.75 3.10	d18.30 e25.95 3.00 3.30	e21.25 d29.50 3.55 3.85	d25.25 d32.75 3.70 4.00	d26.50 d33.95 3.90 4.10	d27.25 d34.95 4.00 4.20	d37.75 d41.75 4.65 5.00	d38.55 d42.75 4.75 5.10	d39.50 d43.75 4.90 5.30	d40.70 d44.75 5.00 5.55	d46.95 d51.75 5.35 6.10	d49.30 d54.50 5.65 6.40	d51.85 d57.15 5.95 6.75	d57.60 d62.25 6.25 7.10	d74.40 82.25 9.10	13.55 17.60	
Delion Tire & Rubber Co., Baltimore, Md. Nov. 21, 1921	(10,000) Cord N.S. Cord Rbd. R. & G.T. Cord T	18.30 2.00	25.75 2.25		32.50 3.10	33.50 3.25	34.50 3.35	42.70 4.05	43.75 4.20	44.85 4.35	46.10 4.50	47.10 4.65	53.20 5.00	55.85 5.25	58.75 5.50	78.55 6.00			



Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	38x6	38x7
Denman-Myers Cord Tire Co., Cleveland, O., Nov. 21, 1921	Cord Rbd. & N.S. Cord G.T.			e20.55 4.25	d26.90 4.40		d34.50 4.95	d35.10 5.40	d36.05 5.50	d43.50 6.25	d44.60 6.50	d46.05 6.75	d47.10 6.95		d54.50 7.70	d57.10 7.90			
Diamond Rubber Co., Akron, O. (see also Goodrich & Co. B.F.) July 20, 1922	P. Double Diamond Tr. "Squegee" N.S. Diamond Fr. Cord "Squegee" Fr. Cord G.T. R.T.	e 9.20 e 9.65 e10.25	e10.65 e13.00 e13.50	d16.30 d20.65 d22.95	e18.00 e20.65 e22.95	d21.20 d22.35 d29.15	d22.35 d22.85 d30.05	d22.85 d30.85 d30.85	d37.70 d38.55 d39.50	d38.55 d39.50 d40.70	d39.50 d40.70 d41.55	d40.70 d41.55 d46.95	d41.55 d46.95 d49.30	d46.95 d49.30 d51.85	d49.30 d51.85 d54.30	d51.85 d54.30 d56.85	d54.30 d56.85 d59.40	d56.85 d59.40 d61.95	d59.40 d61.95 d64.50
Doss Rubber & Tube Co., Atlanta, Ga. Nov. 10, 1921	P. N.S. Cord N.S. G.T. R.T. Comp. T "Gregorian" { Cord N.S.	13.15 15.45 21.75 2.15 2.65 13.60 12.10	16.45 18.45 21.75 2.55 3.10 15.30 14.40	20.50 23.20 29.65 2.90 3.30 17.00 18.25	23.30 27.45 37.30 3.45 3.75 22.10 20.15	28.60 30.69 37.30 3.55 3.95 23.80 24.20	29.00 33.10 40.00 3.70 4.10 25.10 25.45	29.00 33.10 40.00 3.90 4.30 26.35 26.00	34.80 39.40 42.75 4.50 5.00 26.35 32.40	34.80 39.40 42.75 4.65 5.15 32.40 33.45	34.80 39.40 42.75 4.80 5.30 33.15 34.50	34.80 39.40 42.75 4.90 5.40 33.15 34.50	34.80 39.40 42.75 5.10 5.60 33.15 34.50	34.80 39.40 42.75 5.25 5.75 33.15 34.50	34.80 39.40 42.75 5.40 5.90 33.15 34.50	34.80 39.40 42.75 5.55 6.05 33.15 34.50	34.80 39.40 42.75 5.70 6.20 33.15 34.50	34.80 39.40 42.75 5.85 6.35 33.15 34.50	
Dural Rubber Corp., Flemington, N. J., Nov. 15, 1921	G.T. R.T.	2.35 2.70	2.45 2.80	2.75 3.10	3.00 3.35	3.70 4.05	3.80 4.15	3.90 4.25	4.00 4.35	4.90 5.25	5.00 5.35	5.10 5.45	5.25 5.60	5.40 5.75	6.10 6.45	6.25 6.60	6.50 6.85	10.40	13.55
Eckrode Rubber Co., Inc., Newark, N. J., Nov. 15, 1921	R.T.		2.45	2.70	2.90	3.45	3.70	3.85	4.00	4.75	4.90	5.10	5.25	5.40	5.70	6.00	6.30	9.40	
Edison Tire & Rubber Co., Chicago, Ill. May 1, 1922	Fbr. N.S. Oversize Cord N.S. Heavy Duty Flat Tread Cord N.S. G.T. R.T.	e10.95 e13.75 e19.80 2.10 2.40	e13.75 e16.50 e22.05 2.40 2.80	d19.15 d26.95 d29.60 2.55 2.95	e21.35 e26.35 e29.60 3.10 3.50	e24.95 e35.65 e37.70 3.20 3.65	e26.30 e36.75 e38.80 3.35 3.80	e26.85 e37.60 e39.85 3.50 4.00											
Empire Tire & Rubber Corp., Trenton, N. J. Aug. 1, 1922	Fabric N.S. Cord N.S. G.T. R.T.	e 9.65 e15.95 1.60 1.75	e10.65 e15.95 1.80 2.00	d16.30 d22.95 2.20 3.10	e20.65 e26.45 2.25 3.45	e21.20 e29.15 2.25 3.65	e22.35 e30.05 2.45 3.80	e22.85 e30.85 2.55 3.95	d37.70 d38.55 2.95 4.60	d38.55 d39.50 3.10 4.80	d39.50 d40.70 3.20 5.05	d40.70 d41.55 3.30 5.20	d41.55 d46.95 3.45 5.60	d46.95 d49.30 3.60 6.00	d49.30 d51.85 3.75 6.30	d51.85 d54.30 3.90 6.60	d54.30 d56.85 4.05 6.90	d56.85 d59.40 4.20 7.20	
Erie Tire & Rubber Co., Sandusky, Ohio, Aug. 5, 1922	Cord Rbd. & N.S. R.T.		e13.50 2.70	d22.95 3.00	e26.45 3.40	d29.15 3.50	e30.05 3.65	e30.85 3.80	d37.70 4.60	d38.55 4.75	*39.50 4.90	d40.70 5.00	d41.55 5.25	d46.95 6.00	d49.30 6.25	d51.85 6.50	d54.30 6.80	d56.85 7.10	d59.40 7.40
Eureka Tire Co., Trenton, N. J. Sept. 1, 1922	N.S. Cord N.S. R.T. G.T.	e10.25 2.40 2.15	e12.50 2.80 2.50	d22.95 2.95 2.65	e26.45 2.95 3.10	d29.15 3.20 3.30	e30.05 3.40 3.60	e30.85 3.50 3.80	d37.70 4.60 4.20	d38.55 4.75 4.40	d39.50 4.90 4.60	d40.70 5.10 4.75	d41.55 5.30 5.05	d46.95 6.00 5.75	d49.30 6.25 6.00	d51.85 6.50 6.25	d54.30 6.80 6.55	d56.85 7.10 6.85	d59.40 7.40 7.15
Falls Rubber Co., Cuyahoga Falls, O. Nov. 10, 1921	Cord Rbd. & N.S. N.S. "Evergreen" Tubes		e19.50 2.40	d27.75 3.00	e31.00 3.35	d34.00 3.60	e35.25 3.70	d36.50 3.80	*43.25 4.50	d44.50 4.70	*45.75 4.80	d47.00 5.00	*48.50 5.20	d53.75 5.50	*56.50 5.85	*59.00 6.15			
Falor Mfg. Co., Akron, O., May 1, 1922	GT.		2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45			
Faure, A., 153 W. 56th St., N. Y. City Aug. 15, 1922	Improved Cords Super Tubes		18.80 3.40				30.50 4.50	31.60 4.70		39.40 5.60	40.75 5.90	41.65 6.10		49.70 7.10	51.80 7.60				
Federal Rubber Co., Cudahy, Wis. Aug. 1, 1922	Plain Black "Defender" Cord "Traffic" "Rugged" "Blue Pennant" Cord Standard G.T. "Blue Pennant" Cord T.	e 8.95 e13.95 e9.95 e11.95 2.00 3.25	e13.95 e10.95 e11.95 e16.95 2.25 3.25		e17.50 e20.50 e22.95 2.55 3.85	e21.50 e22.50 e29.15 3.10 4.00	e22.50 e23.05 e30.05 3.25 4.15	e23.50 e24.05 e30.85 3.35 4.15	d37.70 d38.55 d39.50 4.10 4.85	d38.55 d39.50 d40.70 4.25 5.00	d39.50 d40.70 d41.55 4.40 5.15	d40.70 d41.55 d46.95 4.55 5.75	d41.55 d46.95 d49.30 4.70 6.00	d46.95 d49.30 d51.85 5.00 6.25	d49.30 d51.85 d54.30 5.25 6.50	d51.85 d54.30 d56.85 5.50 6.75			
Fidelity Tire & Rubber Co., Massillon, O., May 15, 1922	N. S. Cord N.S.	10.50 15.00	12.00 15.00																
Firestone Tire & Rubber Co., Akron, O. Aug. 1, 1922	Cord N.S. Fabric N.S. G.T. R.T.	e8.95 1.90 2.40	e12.45 e10.65 2.25 2.80	d22.95 e20.65 2.55 2.95	e26.45 e20.65 3.10 3.45	d29.15 e21.35 3.25 3.70	e30.05 e22.45 3.35 3.80	e30.85 e23.65 3.50 4.00	d37.70 d38.55 4.10 4.65	d38.55 d39.50 4.20 4.75	d39.50 d40.70 4.30 4.90	d40.70 d41.55 4.40 5.10	d41.55 d46.95 4.55 5.30	d46.95 d49.30 5.00 5.70	d49.30 d51.85 5.25 6.00	*51.85 5.45 6.35			
Fisk Rubber Co., Chicopee Falls, Mass. July 31, 1922	Regular Tubes Heavy Tubes P. N.S. Red Top Cord N.S.	2.00 e8.85 e9.85 e11.80	2.25 e10.65 e12.85 e15.85	2.50 3.00 d17.00 e19.65 d22.95	3.10 3.85 e18.75 e22.65 e26.45	3.25 4.00 d21.00 d23.65 d29.15	3.25 4.00 d22.00 d24.65 d30.05	3.50 4.25 d22.95 d30.85 d30.85	4.25 5.00 d37.70 d38.55 d39.50	4.25 5.00 d38.55 d39.50 d40.70	4.50 5.25 d40.70 d41.55 d46.95	4.50 5.25 d41.55 d46.95 d49.30	4.75 5.50 d46.95 d49.30 d51.85	5.00 5.75 d49.30 d51.85 d54.30	5.25 6.00 d51.85 d54.30 d56.85	5.50 6.25 d54.30 d56.85 d59.40	5.75 6.50 d56.85 d59.40 d61.95	13.50	11.00
G. & J. Tire Co., 1790 Broadway, N. Y. City July 29, 1922	P. "G" Tread "Stalwart" N.S. Cord R.T. G.T.	e9.25 e 9.75 e11.40 2.45 1.95	e10.65 e13.00 e14.65 2.90 2.30	d15.70 e16.90 d22.95 2.05 2.60	e18.65 e21.35 d26.45 3.05 3.20	e20.85 e22.45 d29.15 3.55 3.30	e21.95 e23.65 d30.05 3.80 3.45	e22.45 e24.15 d30.85 4.10 3.60	d22.40 d24.15 d37.70 4.75 4.20	d23.65 d25.35 d38.55 4.90 4.35	d24.15 d25.85 d39.50 5.05 4.45	d25.35 d27.05 d40.70 5.25 4.50	d27.05 d28.75 d41.55 5.45 4.70	d28.75 d30.45 d46.95 5.70 5.15	d30.45 d32.15 d49.30 6.00 5.40	d32.15 d33.85 d51.85 6.25 5.60			
Gates Rubber Co., Denver, Colo. Sept. 5, 1922	N.S. Cord N.S. R.T.	e 9.90 2.40	e11.40 2.80	d16.30 2.95	e20.65 3.45	d21.65 3.70	d22.80 3.80	d23.25 4.00	d28.95 4.75	d29.90 4.90	d30.80 5.10	d32.40 5.25		d47.65 5.40	d49.80 5.70	d52.10 6.00	d54.85 6.35	d57.60 6.60	d60.35 6.85
General Tire & Rubber Co., Akron, O. Sept. 1, 1922	N.S. G.T. Cord R.T.	e12.15 2.35 2.60	e17.55 2.40 3.80	d23.95 2.85 3.60	e29.75 3.40 3.95	d31.05 3.60 4.10	d33.65 3.70 4.25	d37.20 3.90 4.50	*40.05 4.45 4.85	d40.40 4.60 5.10	*42.15 4.80 5.30	d46.95 5.25 5.45	*48.10 5.50 5.70	d49.70 5.80 6.20	*50.15 6.00 6.50	*55.00 6.25 6.80			
Giant Tire & Rubber Co., Findlay, O. Jan. 1, 1922	Cord "Hancock" Fabric G.T. R.T.	7.40 1.55 1.65	8.50 1.85 2.30	22.93 2.10 2.70		29.20 2.60 3.05	30.00 2.75 3.70	30.87 2.95 3.80	35.60 3.50 4.45	36.40 3.70 4.60	37.27 3.80 4.75	38.40 3.90 4.85		44.27 4.00 4.95	46.54 4.35 5.50				
Gillette Rubber Co., Eau Claire, Wis. Aug. 10, 1922	N.S. Cord N.S. G.T. "Gillette" & "Chippewa" R.T.	e 9.90 1.90 2.40	e11.95 2.25 2.80	d16.25 e22.95 2.50 2.95	e18.50 e26.45 3.10 3.45	d21.25 e29.15 3.20 3.70	d22.25 d30.05 3.35 3.80	d22.75 d30.85 3.50 4.00	d37.75 d38.55 4.05 4.65	d38.55 d39.50 4.20 4.75	d39.50 d40.70 4.30 4.90	d40.70 d41.55 4.40 5.10	d41.55 d46.95 4.50 5.30	d46.95 d49.30 5.00 5.70	d49.30 d51.85 5.25 6.00	d51.85 d54.30 5.45 6.35	d54.30 d56.85 5.70 6.55	d56.85 d59.40 6.00 6.85	
Girard Tire & Rubber Co., Trenton, N. J., Nov. 15, 1921	N.S. Cord N.S.	12.50 19.90	14.45 26.70	20.10 34.00	22.50 35.00	26.40 35.95	27.80 43.90	28.50 44.80	35.50 45.90	36.70 47.20	37.90 48.30	39.60 54.00	40.40 57.30		46.20 60.20	48.90 62.50	51.60 65.00		



Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	36x6	38x7
Globe Rubber Tire Mfg. Co Trenton, N. J. Nov. 15, 1921	Rbd. & H.B. Cord Rbd. & H.B. R.T. G.T.	..... ..... ..... .....	c12.50 c19.90 2.50 1.95	\$14.45 d26.70 2.80 2.30	d20.10 2.95 2.55 2.55	\$22.50 3.45 3.10 3.10	d26.40 3.70 3.80 3.20	d27.80 3.80 4.00 3.50	d28.50 3.95 4.00 4.05	d35.50 d43.90 4.60 4.05	d36.70 d44.80 4.75 4.20	d37.90 d45.90 4.90 4.30	d39.60 d47.20 5.10 4.35	d40.30 d48.30 5.30 4.55	d46.20 d54.50 5.70 5.00	d48.90 *57.30 6.00 5.25	d48.90 *60.20 6.35 5.45	..... ..... ..... .....	
Goodrich Co., B. F. "Silvertown" Cord Rbd. & N.S. Akron, O. July 20, 1922	G.T. R.T. N.S.	..... ..... .....	c13.50 1.90 2.40 c10.25	d22.95 2.25 2.80 c13.00	d26.45 2.55 2.95 d16.30	d29.15 3.10 3.45 d20.65	d30.05 3.20 3.65 d21.20	d30.85 3.35 3.80 d22.35	d37.70 4.05 4.00 d22.85	d38.55 4.20 4.65 .....	d39.50 4.25 4.75 .....	d40.70 4.30 4.90 .....	d41.55 4.35 5.10 .....	d46.95 4.55 5.10 .....	d49.30 5.00 5.70 .....	d51.85 5.20 6.00 .....	..... ..... ..... .....		
Goodyear Tire & Rubber Co., Akron, O. August 1, 1922	P. All Weather, N.S. Cord All Weather & Rbd. Cord Cross Rbd. Regular Tubes Heavy Tourist Tubes	..... ..... ..... ..... ..... .....	c9.20 c10.25 ..... ..... 2.00 2.40	d16.30 c12.50 ..... ..... 2.25 2.80	d20.65 d16.30 ..... ..... 2.55 3.10	d21.20 d22.95 ..... ..... 3.10 3.50	d23.35 d26.45 ..... ..... 3.25 3.80	d22.85 d29.15 ..... ..... 3.35 4.00	d28.95 d30.85 ..... ..... 3.50 4.20	d37.70 d38.55 ..... ..... 4.05 4.75	d38.55 d39.50 ..... ..... 4.20 4.90	d40.70 d41.55 ..... ..... 4.30 5.10	d41.55 d46.95 ..... ..... 4.35 5.25	d49.30 d39.10 ..... ..... 5.00 5.70	d51.85 d41.05 ..... ..... 5.20 6.00	..... ..... ..... ..... 6.30 6.30	..... ..... ..... ..... ..... .....		
Gordon Tire & Rubber Co., Canton, O. Nov. 19, 1921	"Locotractor" "Triangle Tread" G.T. R.T. Cord N.S.	..... ..... ..... ..... .....	c11.75 c12.35 1.90 ..... c18.00	d14.15 d19.15 2.25 ..... d29.35	d18.25 d21.75 2.55 ..... d31.00	d20.60 d21.75 3.10 ..... d32.50	d24.14 d26.75 3.20 ..... d33.50	d25.40 d27.35 3.35 ..... d34.50	d25.95 d27.35 3.50 ..... d35.50	d34.05 d34.05 4.05 ..... d37.70	d35.15 d36.30 4.20 ..... d38.55	d36.30 d38.00 4.30 ..... d40.70	d38.00 d38.50 4.35 ..... d41.55	d44.50 d44.50 4.55 ..... d49.30	d47.20 d47.20 4.75 ..... d51.85	d47.20 d47.20 5.00 ..... d53.90	d47.20 d47.20 5.25 ..... d55.50	d47.20 d47.20 5.45 ..... d57.30	..... ..... ..... ..... ..... .....
Grand Rapids Tire & Rubber Corp., Grand Rapids, Mich. Aug. 14, 1922	Cord Heavy G.T. Heavy R.T.	..... ..... .....	c14.95 1.90 2.40	\$15.95 2.25 2.80	d22.95 2.55 2.95	\$26.45 3.10 3.45	d29.15 3.20 3.65	d30.05 3.35 3.80	d30.85 3.50 4.00	d37.70 4.05 4.65	d38.55 4.20 4.75	d39.50 4.25 4.90	d40.70 4.30 5.10	d41.55 4.35 5.30	d46.95 4.55 5.70	d49.30 5.00 6.00	d51.85 5.20 6.35	d53.90 5.45 11.50	.....
Grow Tire Co., Boston, Mass. May 19, 1922	N.S. Cord N.S. R.T.	..... ..... .....	c10.20 c19.00 3.30	d13.00 d25.75 3.85	d19.15 d21.75 4.15	d20.00 d22.50 4.90	d25.45 d32.50 5.00	d26.80 d33.50 5.15	d27.35 d34.50 5.35	d37.70 d42.70 6.25	d38.55 d43.75 6.50	d39.50 d44.85 6.65	d40.70 d46.10 6.85	d41.55 ..... .....	d46.95 d53.20 7.75	d49.30 d55.50 8.20	d51.85 d61.00 8.60	d53.90 d78.55 14.70	.....
Hamilton Rubber Mfg. Co., Trenton, N.J. Dec. 1, 1921	R.T.	2.15	2.40	2.70	2.95	3.45	3.70	3.80	4.00	4.60	4.75	4.90	5.10	5.30	5.70	6.00	6.35	11.40	16.45
Hanes Rubber Co., Winston-Salem, N. C. Sept. 1, 1922	"Midget" Cord N.S. "Midget" R.T.	..... .....	c10.75 2.40	c13.15 2.80	d22.95 3.10	..... 3.50	d29.15 3.70	d30.05 3.85	d30.85 4.00	d37.70 4.75	d38.55 4.90	d39.50 5.10	d40.70 5.25	d41.55 .....	d46.95 5.70	d49.30 6.00	d51.85 .....	d53.90 .....	.....
Hannibal Rubber Co. Hannibal, Mo. Dec. 1, 1921	Rbd. N.S. Cord N.S. G.T.	..... ..... ..... .....	c10.95 c10.95 1.90 .....	c13.75 c13.75 2.25 .....	d19.15 d19.15 2.55 .....	d22.05 d22.05 3.10 .....	d25.45 d26.80 3.20 .....	d26.80 d27.35 3.35 .....	d27.35 d27.35 3.50 .....	d34.05 d34.05 4.05 .....	d35.20 d36.25 4.20 .....	d37.95 d37.95 4.35 .....	d38.55 d38.55 4.55 .....	d43.45 d43.45 5.00 .....	d43.45 d43.45 5.25 .....	d46.30 d46.30 5.45 .....	d48.90 d48.90 5.45 .....	.....	
Hardwear Tire Corp. East Rutherford, N. J. June 15, 1922	(6,000) Fabric (8,000) Cord R.T.	..... ..... .....	c10.50 c14.60 2.40	d12.90 d23.00 2.80	c15.00 d23.75 2.95	d25.00 d25.00 3.45	d25.50 d26.00 3.80	d26.00 d26.00 4.00	d32.50 d32.50 4.65	d33.50 d33.50 4.75	d34.50 d34.50 4.90	d36.00 d36.00 5.10	d38.00 d38.00 5.30	d40.00 d40.00 5.70	d42.00 d42.00 6.00	d44.00 d44.00 6.35	d46.00 d46.00 8.00	.....	
Hawkeye Tire & Rubber Co., Des Moines, Ia. Nov. 15, 1921	N.S. G.T. Santa Fe P. Santa Fe N.S.	..... ..... ..... .....	12.35 2.35 9.85 10.40	14.75 2.75 12.55 19.15	21.15 3.00 19.15 22.05	24.05 3.40 25.45 26.80	27.45 3.60 27.35 27.35	28.80 3.75 29.35 29.35	36.05 3.95 36.05 36.05	37.20 4.65 37.20 37.20	38.25 4.80 38.25 38.25	39.95 5.00 39.95 39.95	40.50 5.10 40.50 40.50	44.20 5.60 44.20 44.20	46.55 5.90 46.55 46.55	49.20 6.20 49.20 49.20	..... ..... ..... .....	.....	
Henry Cord Tire Co., Akron, Ohio	10,000 Mile Cord N.S.	.....	c15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hewitt Rubber Co., Buffalo, N. Y. Aug. 10, 1922	Fabric "Hewitt" Cord "White Seal" Cord G.T. R.T.	c10.50 ..... ..... 1.95 2.25	c10.95 ..... ..... 2.00 2.40	c13.00 ..... ..... 2.25 2.80	d16.90 ..... ..... 2.55 3.10	c21.35 ..... ..... 3.10 3.50	d22.45 ..... ..... 3.25 3.70	d23.65 ..... ..... 3.35 3.85	d24.15 ..... ..... 3.50 4.00	d30.05 ..... ..... 4.05 4.70	d31.05 ..... ..... 4.20 4.85	d32.05 ..... ..... 4.35 5.00	d33.55 ..... ..... 4.55 5.15	d34.00 ..... ..... 5.30 5.35	d39.30 ..... ..... 5.70 6.00	d41.70 ..... ..... 6.35 6.35	..... ..... ..... .....	.....	
Howe Rubber Co., New Brunswick, N. J. June 26, 1922	N.S. R.T. Cord Rbd. & N.S. "Clover Leaf" Black Tread	..... ..... ..... .....	c16.00 2.15 2.25 c12.00	c18.00 2.25 2.40 c12.50	d23.00 2.40 3.20 .....	c26.00 3.60 3.70 d32.30	d30.00 3.70 3.85 d33.10	d31.00 3.85 4.00 d34.20	d32.00 4.00 4.15 d35.45	d37.70 4.75 4.90 d42.25	d38.55 4.90 5.10 d43.90	d39.50 5.10 5.25 d44.20	d40.70 5.25 5.40 d45.30	d41.55 5.40 5.50 d46.40	d46.95 5.70 6.00 d52.00	d49.30 6.00 6.30 d54.30	d51.85 6.30 9.65 d57.30	d53.90 14.90 120.00	.....
Hubbell Rubber Co., Cleveland, Ohio Jan. 1, 1922	Cord N.S.	.....	c18.00	d25.50	d29.40	d32.40	d33.40	d34.25	d41.90	d42.85	d43.90	d45.20	d46.15	d52.15	d54.75	d57.60	.....	.....	.....
Hydro-United Tire Co., (10,000) Hydro-Toron N.S. Philadelphia, Pa. June 15, 1922	Tubes	.....	c11.60 2.00	c14.00 2.25	d19.15 2.55	c19.60 3.10	d25.45 3.25	d26.80 3.35	d27.35 3.50	d34.05 4.15	d35.20 4.30	d36.25 4.45	d37.95 4.60	d41.25 5.00	d43.75 5.25	.....	.....	.....	.....
Ideal Tire & Rubber Co., Cleveland, O. Aug. 7, 1922	"Greyhound" N.S. G.T. R.T. "Greyhound" Cord N.S. "Ranger" N.S. Aero Cord.	..... ..... ..... ..... ..... .....	c12.05 1.60 2.00 c8.95 c9.10 .....	c14.30 1.85 2.35 c17.30 c11.45 c15.60	d17.10 2.15 2.45 d24.85 d15.95 d21.25	c20.65 2.60 2.80 d25.00 d17.80 d25.00	d21.20 2.65 3.00 d27.00 d19.00 d27.00	d22.35 2.80 3.10 d27.55 d20.10 d27.55	d22.85 2.90 3.25 d33.35 d30.60 d33.35	d23.80 3.40 3.75 d34.25 d37.70 d34.25	d30.70 3.55 3.90 d35.20 d38.55 d35.20	d32.10 3.60 4.10 d36.10 d39.50 d36.10	d33.55 3.80 4.30 d37.95 d40.70 d37.95	d34.00 4.15 4.65 d42.25 d41.55 d42.25	d39.30 4.35 4.90 d44.20 d46.95 d44.20	d41.70 4.90 5.10 d46.70 d49.30 d46.70	d43.00 5.45 5.45 d51.85 d51.85 d51.85	..... ..... ..... ..... ..... .....	
India Tire & Rubber Co., Akron, O. Aug. 5, 1922	N.S. Cord N.S. G.T. R.T.	..... ..... ..... .....	c11.70 2.05 2.30	c14.65 2.10 2.70	d19.05 2.25 3.00	c20.65 2.60 3.30	d23.05 2.80 3.45	d24.45 2.90 3.55	d25.20 3.00 3.70	d32.50 3.40 4.00	d33.45 3.50 4.15	d34.25 3.60 4.25	d35.20 3.70 4.35	d36.10 3.80 4.45	d40.25 4.15 4.70	d42.75 4.45 5.15	d47.70 5.15 5.70	*50.15 5.45 6.20	*52.75 5.70 6.45
Inland Rubber Co., C Chicago, Ill. Aug. 10, 1922	Fabric Cord Rbd. & N.S. "Ireo" Cord "Ireo" Fabrics G.T. R.T.	..... ..... ..... ..... ..... .....	c10.25 c15.95 c13.50 c9.65 1.90 2.40	c13.00 c22.95 c13.50 c10.65 2.25 2.80	d16.30 d22.95 d16.30 d10.65 2.55 2.95	c20.65 d26.45 c20.65 c10.65 3.10 3.45	d21.20 d29.15 d21.20 c10.65 3.20 3.65	d22.35 d30.05 d22.35 c10.65 3.35 3.80	d22.85 d30.85 d22.85 c10.65 3.50 4.00	d37.70 d38.55 d37.70 c10.65 4.05 4.65	d38.55 d39.50 d38.55 c10.65 4.20 4.75	d39.50 d40.70 d39.50 c10.65 4.30 4.90	d41.55 d41.55 d41.55 c10.65 4.45 5.10	d46.95 d46.95 d46.95 c10.65 4.55 5.30	d49.30 d49.30 d49.30 c10.65 5.00 5.70	d51.85 d51.85 d51.85 c10.65 5.20 6.00	..... ..... ..... ..... ..... .....	.....	
Iowa Cord Tire Co., Des Moines, Iowa Sept. 1, 1922	Trade Maker Spec. P. N.S. Cord P. Cord N.S. G.T. R.T.	..... ..... ..... ..... ..... .....	9.70 c10.71 c14.73 1.90 2.35	11.00 c12.33 c18.57 2.25 2.70	c17.87 c21.00 c23.55 2.55 2.95	d21.06 d24.70 d27.35 3.15 3.30	d22.05 d25.89 d27.35 3.25 3.65	d22.59 d26.51 d28.96 3.45 3.80	d28.13 d33.01 d33.80 4.00 4.40	d29.03 d34.06 d34.56 4.10 4.55	d29.97 d35.15 d35.46 4.20 4.70	d31.37 d36.72 d37.26 4.30 4.85	d31.82 d37.24 d37.62 4.40 4.90	d35.10 d40.71 d42.08 4.55 5.10	d36.77 d43.08 d44.19 4.65 5.20	d39.24 d45.70 d46.44 4.95 5.35	d41.70 d48.22 d48.02 5.15 5.65	d43.00 d50.54 d51.30 5.35 6.95	..... ..... ..... ..... ..... .....
IXL Tire Co., Peoria, Ill.	Diamond Cup N.S. G.T.	..... .....	c8.75 2.15	c9.65 2.55	d18.75 2.90	d10.75 3.10	d20.75 3.55	d25.20 3.75	..... .....	..... .....	..... .....	..... .....	..... .....	..... .....	d49.75 5.85	..... .....	..... .....	..... .....	.....
Johnstown Automobile Co., Johnstown, Pa.	"Jaco" T.	.....	1.95	2.30	2.60	3.20	3.30	3.45	3.60	4.20	4.35	4.45	4.50	4.70	5.15	5.40	5.60	.....	.....
Johnstone Tire & Rubber Co., La Porte, Ind. Nov. 15, 1921	10,000 Cord N.S. G.T. R.T.	..... ..... ..... .....	..... c10.85 2.05 2.60	d20.75 c13.55 2.40 3.05	d30.15 *20.15 2.95 3.65	c23.00 c23.00 3.50 4.40	d26.40 d26.40 3.60 4.50	d28.80 *26.80 3.80 4.75	d29.15 d29.15 3.90 4.90	d40.15 d40.15 4.65 5.85	d42.90 d42.90 4.85 5.95	d44.90 d44.90 4.95 6.15	d46.25 d46.25 5.00 6.20	*39.85 5.15 6.40	d53.15 5.90 7.15	d55.75 6.20 7.35	*4		



Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	30x4½	33x5	35x5	37x5	30x6	38x7
Keaton Tire & Rubber Co., San Francisco, Cal. Aug. 7, 1922	Cord Rbd. & N.S. R.T.	.....	c16.90	25.90	28.80	30.85	31.85	32.90	39.85	40.80	41.90	43.25	44.25	51.90	55.90	58.90	.....	.....	.....
		2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	.....	.....	.....
Kelly Springfield Tire Co., New York Oct. 2, 1922	Kant-Slip Cord K.S.—B.B.	.....	c10.30	c11.90	d16.80	c19.20	d22.00	d22.80	d23.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		2.15	c14.65	d23.00	c26.40	d29.10	d30.00	d30.95	d37.80	d38.75	d39.50	d40.90	d41.85	d46.80	d49.25	d51.90	d79.65	d109.40	d11.90
		.....	2.70	2.90	3.35	3.45	3.60	3.70	4.65	4.75	4.95	5.00	5.25	6.00	6.25	6.65	10.65	11.90	.....
Kenyon Co., Inc. First Ave. & 57th St., Brooklyn, N. Y. Aug. 8, 1922	Cord N.S. "Duro" Cord N.S. R.T. B.T. Super-Cord G.T.	.....	c14.20	c15.00	d22.95	d26.45	d29.15	d30.05	d30.85	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85	.....	.....
		.....	c12.50	.....	d22.65	d23.65	d24.65	d25.65	d30.50	d31.50	d32.50	.....	.....	.....	.....	.....	.....	.....	.....
		2.20	2.40	2.80	3.00	3.25	3.50	3.70	4.00	4.20	4.40	4.65	4.90	5.10	5.30	5.60	.....	.....	.....
		1.65	1.80	2.25	2.70	2.85	2.95	3.00	3.60	3.75	3.85	3.90	4.05	4.50	4.60	4.85	.....	.....	.....
		2.85	3.15	3.45	3.85	4.20	4.35	4.50	5.30	5.50	5.65	5.80	5.95	6.65	7.00	7.30	*10.75	11.50	.....
Keystone Titr & Rubber Co., New York City, N. Y. Aug. 10, 1922	Cord N.S. Fabrics Tubes	.....	c15.95	d22.95	d26.45	d29.15	d30.05	d30.85	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85	d74.30	.....	.....
		c10.25	d11.65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	9.25	.....	.....
Kokomo Rubber Co., Kokomo, Ind. Aug. 10, 1922	Cord N.S. "Twin Grip" N.S. & Rbd. "Super Twin" Grip Crusader G.T. R.T.	.....	c10.25	c11.50	d16.30	c18.65	c21.20	d22.35	d22.85	.....	.....	.....	.....	.....	.....	.....	.....	d70.00	.....
		.....	c9.65	c10.65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		1.85	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	.....	.....
		2.30	2.40	2.80	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	12.45	.....	.....
Lambert Tire & Rubber Co., Akron, O. May 3, 1922	"Trublpruf" Rbd. N.S.	.....	.....	27.85	37.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		.....	.....	27.85	38.80	36.75	49.00	.....	56.00	53.00	.....	59.75	.....	.....	.....	.....	.....	.....	.....
Lancaster Tire & Rubber Co., Columbus, O. Aug. 1, 1922	Cord N.S. Oversize Fabric N.S. Heavy Tubes Lancaster Tubes	c12.25	c12.35	c14.75	d22.95	d26.45	d29.15	d30.05	d30.85	d37.70	d38.55	d39.50	d40.70	.....	d46.95	d49.30	d51.85	.....	.....
		.....	2.40	2.80	2.95	3.40	3.60	3.75	3.90	4.50	4.70	4.85	4.95	.....	5.60	5.90	6.20	.....	.....
		1.80	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	.....	.....
Latex Tire & Rubber Co., Fond du Lac, Wis. June 1, 1922	Rbd. & N.S. Cord N.S. G.S. Tubes	.....	10.95	13.75	19.15	21.35	24.95	26.30	26.85	33.40	34.50	35.65	37.90	.....	42.00	44.45	.....	.....	.....
		.....	1.90	18.00	25.50	.....	32.40	33.40	34.25	41.90	42.85	43.90	45.20	.....	52.15	54.75	.....	.....	.....
		.....	.....	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	.....	.....
Lee Tire & Rubber Co., Conshohocken, Pa. Aug. 5, 1922	Ribbed N.S. G.S. Tubes Puncture Ribbed Proof N.S. "De Luxe" Cord N.S. (Puncture Proof Cd. N.S. Standard Cord	c10.45	.....	c11.55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		2.00	2.80	3.10	3.50	3.70	3.85	4.00	4.75	4.90	5.10	5.25	5.40	5.70	6.00	6.30	10.15	16.00	.....
		c19.10	c24.75	d29.95	c31.85	d34.45	d36.25	d37.05	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85	d85.75	.....	.....
		.....	d17.15	d22.95	d26.45	d29.15	d30.05	d30.85	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85	d85.75	.....	.....
		.....	.....	.....	d35.80	d39.85	d40.75	d41.95	d54.25	d55.45	d56.75	d58.50	d59.75	d64.50	d67.75	d71.25	d98.50	d135.05	.....
		.....	c14.95	.....	d25.55	d26.85	d27.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln Highway Tire Co., 1339 So. Michigan Ave., Chicago, Ill. Nov. 18, 1921	Rbd. N.S. G.T. R.T. Cord N.S.	c12.80	c15.20	d19.25	c21.50	d25.55	d26.90	d27.45	d34.20	d35.30	d36.40	d38.10	d38.70	.....	d44.60	d47.40	.....	.....	.....
		c13.05	c15.75	d20.25	d24.65	d26.90	d28.30	d28.90	d36.00	d37.15	d38.35	d40.10	d40.70	.....	d47.05	d49.90	.....	.....	.....
		1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	.....	5.20	5.45	.....	.....	.....
		2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	.....	6.00	6.35	.....	.....	.....
		.....	.....	.....	d30.85	d34.00	d35.10	.....	d43.10	d45.00	d46.10	.....	.....	d54.75	d57.50	.....	.....	.....	.....
Lion Tire & Rubber Corp., Lafayette, Ind. April 17, 1922	Fabrics Tubes Cords Cord Tubes	8.95	10.10	16.75	18.10	19.65	20.20	21.95	32.25	33.80	35.35	36.90	.....	43.00	46.10	.....	.....	.....	.....
		1.65	1.90	2.20	2.45	2.60	2.70	2.85	3.30	3.45	3.60	3.70	3.85	.....	4.30	4.50	.....	.....	.....
		.....	.....	23.85	30.30	31.30	32.00	32.00	38.60	40.45	42.40	44.35	45.50	.....	51.60	54.50	.....	.....	.....
		.....	2.60	.....	3.15	3.30	3.45	4.05	4.25	4.30	4.50	4.65	.....	5.15	5.40	.....	.....	.....	.....
London Rubber Co., Pittsburgh, Pa., Nov. 15, 1921	G.T. R.T.	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	.....	.....	.....
		2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	.....	.....	.....
McClaren Rubber Co., Charlotte, N. C. Aug. 1, 1922	"Autocrat" Cord All Road G.T. R.T.	.....	c18.75	d26.95	d29.45	d32.50	d33.50	d34.50	d42.80	d43.75	d44.85	d46.20	d47.15	d53.20	d55.95	d58.80	d82.65	.....	.....
		9.95	11.95	.....	20.95	21.95	22.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.25	5.45	.....	.....	.....
		2.40	2.80	3.10	3.60	3.70	3.85	4.00	4.75	4.90	5.10	5.25	5.40	5.70	6.00	6.30	10.90	.....	.....
McLean Tire & Rubber Co., East Liverpool, O. Nov. 15, 1921	N.S. Cord N.S. G.T. Cord G.T.	c12.35	c14.75	d19.15	c22.00	d25.45	d26.80	d27.45	d34.20	d35.30	d36.40	d38.10	d38.70	.....	d44.60	d47.40	.....	.....	.....
		.....	c18.30	d25.50	.....	d32.40	d33.40	d34.25	d41.90	d42.85	d43.90	d45.20	d46.10	d52.15	d54.75	d57.60	.....	.....	.....
		1.85	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	.....	.....
		.....	3.10	3.35	4.10	4.20	4.25	4.30	5.00	5.10	5.20	5.30	5.45	6.00	6.20	6.45	.....	.....	.....
McTair Rubber Co., West Haven, Conn. Jan. 1, 1922	G.T. R.T.	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.55	5.00	5.20	5.45	7.75	11.80	.....
		2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	8.85	12.75	.....
Madison Tire & Rubber Co., Inc. Buffalo, N. Y. June 5, 1922	N.S. Cadet Cord N.S. Cord N.S. G.T.	c13.00	c15.00	d25.50	d27.00	d30.00	d31.00	d32.80	d38.20	d39.75	d41.00	d42.00	d43.00	d49.50	d50.75	d57.00	d60.00	d63.00	.....
		.....	c18.00	d25.50	.....	d32.40	d33.40	d34.25	d41.90	d42.85	d43.90	d45.20	d46.10	d52.15	d54.75	d57.60	.....	.....	.....
		2.25	2.40	2.70	3.25	3.35	3.50	3.65	4.35	4.45	4.60	4.65	4.85	5.30	5.50	5.75	8.90	.....	.....
Majestic Tire & Rubber Co., Indianapolis, Ind. No. 15, 1921	P. N.S. G.T. R.T. Cord N.S. Cord Rbd. G.T. R.T.	c10.50	c12.75	d21.30	c19.25	d25.55	d26.90	d27.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		.....	2.30	3.10	3.20	3.20	3.35	3.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		1.95	2.80	3.40	2.95	3.55	3.70	3.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		2.40	2.80	3.40	2.95	3.55	3.70	3.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		.....	c26.35	d29.60	.....	d37.65	d38.80	d39.85	d42.55	d43.55	d44.70	d46.00	d46.95	d53.00	d55.70	d58.60	.....	.....	.....
		.....	d28.90	.....	.....	d36.70	d37.80	d38.85	d41.50	d42.50	d43.55	d44.80	d45.75	d51.70	d54.30	d57.15	.....	.....	.....
		.....	2.30	2.60	.....	3.20	3.35	3.50	4.05	4.20	4.30	4.35	4.55	5.00	5.20	5.45	.....	.....	.....
		.....	2.80	2.95	.....	3.55	3.70	3.85	4.50	4.65	4.75	4.95	5.20	5.55	5.85	6.15	.....	.....	.....
Mansfield Tire & Rubber Co., "America," "Mans.," "Ohio" & "United" N.S. Amer., Mans., O., Rich., United Overseas Cord N.S. Mansfield, Ohio July 20, 1922	G.T. R.T.	c9.60	c9.75	c10.65	d15.60	c18.65	d20.85	d21.95	d22.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		.....	.....	13.60	22.95	26.45	29.15	30.05	30.85	37.70	38.55	39.50	40.70	41.55	46.95	49.30	51.85	.....	.....
		1.85	1.90	2.25	2.55	3.10	3.20	3.35	3.50	4.05	4.20	4.25	4.30	4.45	5.00	5.30	5.45	.....	.....
		2.30	2.40	2.80	2.95	3.45	3.65	3.80	4.00	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	.....	.....



Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	36x6	38x7
Mercer Rubber Co., Hamilton Square, N. J. Nov 22, 1921	G.T. R.T.	1.90 2.40	2.25 2.80	2.55 2.95	3.10 3.45	3.20 3.65	3.35 3.80	3.50 4.00	4.05 4.65	4.20 4.75	4.25 4.90	4.30 5.10	4.55 5.30	5.00 5.70	5.20 6.00	5.45 6.35			
Meyer Rubber Co., Columbiana, O. June 1, 1922	N.S.	c12.35	c14.75	d19.15	c22.00	d25.45	d26.80	d27.35	d34.05	d35.25	d36.25				d40.65				
Michelin Tire Co., Milltown, N. J. August 1, 1922	Fabrics Reg. Cords Oversize Cords Tubes	c10.00 c12.75 c15.50 2.40	c12.75 d18.90 d23.35 2.45	c15.50 d21.90 d26.45 2.70	c18.90 d25.50 d30.00 2.90	c21.90 d28.50 d33.00 3.45	c25.50 d31.50 d36.00 3.70	c28.50 d34.50 d39.00 3.85	c31.50 d37.50 d42.00 4.00	c34.50 d40.50 d45.00 4.25	c37.50 d43.50 d48.00 4.50	c40.50 d46.50 d51.00 4.75	c43.50 d49.50 d54.00 5.10	c46.50 d52.50 d57.00 5.25	c49.50 d55.50 d60.00 5.40	c52.50 d58.50 d63.00 5.70	c55.50 d61.50 d66.00 6.00	c58.50 d64.50 d69.00 6.30	c61.50 d67.50 d72.00 6.60
Mid-Continent Tire Mfg. Co., Wichita, Kan. Dec. 1, 1921	"Midco" Rbd. N.S. Cord G.T. R.T. Cord T.	c12.65 c13.35 2.00 2.50 3.60	c16.00 c22.00 2.40 2.80 3.60	d20.00 d31.00 2.80 3.20 4.00	c23.50 d38.75 3.30 3.75 4.40	d27.50 d40.20 3.40 3.85 4.40	d28.90 d41.15 3.50 4.00 4.60	d29.50 d42.45 3.60 4.10 4.75	d36.80 d45.45 4.30 4.75 5.50	d38.30 d46.50 4.40 4.90 5.60	d39.15 d47.50 4.50 5.00 5.70	d40.90 d48.25 4.60 5.10 5.75	d41.50 d49.00 4.70 5.20 5.80	d45.40 d50.50 4.90 5.40 6.00	d48.00 d53.00 5.10 5.60 6.20	d50.00 d55.00 5.30 5.80 6.40	d51.85 d56.90 5.45 5.95 6.55	d53.70 d58.80 5.60 6.10 6.70	d55.55 d60.65 5.75 6.25 6.85
Midland Tire & Rubber, Coshocton, O. Dec. 15, 1921	"Peerless" N.S. "McClurg" P. N.S. "Eternal" G.T. R.T.	11.20 13.60 15.35 1.90 2.40	10.95 14.15 16.80 1.90 2.40	13.75 14.15 16.80 2.25 2.80	19.15 18.90 21.60 2.25 2.95	21.35 24.50 24.05 3.10 3.45	24.95 26.10 28.00 3.20 3.65	26.30 27.35 29.30 3.35 3.80	26.85 28.30 30.40 3.50 4.00		34.50 32.80 35.35 4.20 4.75		35.35 37.60 41.30 4.25 4.90		38.65 41.30 45.30 4.55 5.10		42.90 45.30 48.15 5.00 5.60		44.95 48.15 51.45 5.20 5.85
Mid-West Tire Mfg. Co., Arvada, Colo. July 10, 1922	P. Cord N.S. N.S. R.T. G.T.	c 8.25 2.15 1.75	c10.45 2.50 1.95	d15.60 2.80 2.30	d26.45 3.15 2.80	d29.25 3.35 2.95	d29.95 3.45 3.05	d37.70 3.60 3.15	d39.50 3.80 3.35	d40.90 4.00 3.50	d42.75 4.20 3.75	d43.90 4.40 3.90	d45.75 4.60 4.10	d46.95 4.80 4.30	d49.25 5.10 4.60	d50.50 5.30 4.80	d51.75 5.50 5.00	d53.00 5.70 5.20	d54.25 5.90 5.40
Miller, Chas E., Anderson, Ind. "Miller-Anderson" Aug. 16, 1922	Rbd. & N.S. Oversize N.S. Cord N.S. R.T.	8.25 9.30 11.85 1.90	8.85 9.65 12.15 1.95	13.95 11.85 14.45 2.25	19.15 15.05 20.25 2.45	14.95 17.10 23.05 2.90	18.55 19.95 25.55 3.10	19.25 21.05 26.35 3.20	19.95 21.50 27.10 3.35	24.85 26.75 33.55 3.85	25.65 27.60 34.35 4.00	26.45 28.55 35.20 4.15	27.65 29.85 36.25 4.25	28.10 29.85 36.75 4.50	32.40 34.95 41.80 4.75	34.40 36.95 43.90 5.00	36.40 39.00 46.15 5.25		
Miller Rubber Co., Akron, O. Aug. 1, 1922	Cord Rbd. Wedge Tr. Cord N.S. Fbr. Cord R.T. G.T. R.T.	9.75 9.80 1.85 2.35	9.80 9.80 1.90 2.40	c13.95 c12.50 c10.90 3.85 2.25 2.80	d22.95 d19.25 d16.30 3.95 2.55 2.95	d26.45 d22.20 d19.55 4.50 3.10 3.45	d29.15 d24.50 d21.20 4.75 3.20 3.65	d30.05 d25.25 d22.35 4.95 3.35 3.80	d37.70 d32.85 d29.90 5.10 3.50 4.00	d38.55 d33.15 d30.20 5.30 3.60 4.10	d39.50 d34.15 d31.20 5.40 3.70 4.20	d40.70 d35.30 d32.40 5.50 3.80 4.30	d41.55 d36.15 d33.25 5.60 3.90 4.40	d46.95 d41.90 d38.95 5.70 4.00 4.50	*49.30 *41.05 39.10 6.00 6.50 7.00	*51.85 *43.50 41.05 6.20 6.70 7.20			
Mississippi Valley Rubber Co., Iowa City, Iowa. Dec. 1,	G.T. R.T. B.T.	1.95 2.45 2.70	2.00 2.50 2.75	2.35 2.85 3.25	2.70 3.15 3.45	3.25 3.55 3.90	3.35 3.90 4.15	3.55 3.90 4.30	3.70 4.10 4.50	4.25 4.75 5.25	4.40 4.90 5.40	4.45 5.15 5.55	4.55 5.20 5.70	4.80 5.45 6.00	5.25 5.85 6.45	5.45 6.15 6.75	5.75 6.50 7.15		
Mohawk Rubber Co., Akron, O. Aug. 3, 1922	N.S. Ribbed "Little Chief" N.S. G. & R.T. Cord N.S. Cord Ribbed	c14.50 c14.25 c12.35 2.25 2.40	c15.00 c16.15 c14.75 2.40 2.60	d17.00 d16.15 d14.75 2.80 3.00	d21.50 d20.45 d19.15 3.50 3.70	d24.50 d23.30 d22.00 3.70 3.90	d28.50 d27.10 d25.85 3.85 4.00	d30.00 d29.00 d27.35 4.00 4.25	d30.50 d29.50 d27.85 4.10 4.35	*37.85 d35.95 d34.60 4.40 4.65	*39.10 d37.70 d36.35 4.50 4.75	40.30 d39.50 d38.15 4.60 4.85	42.00 d40.90 d39.55 4.70 4.95	43.00 d42.75 d41.40 4.80 5.05	*48.00 *45.60 5.10 5.35	52.00 *49.40 5.20 5.45			
Monarch Rubber Co., 30x3, 30x3½ Hartville, O. 31x4 Clincher Aug. 25, 1922 All others S.S.	Ribbed N.S. Cord N.S. G.T. R.T.	9.20 10.30 2.00 2.40	13.00 16.35 2.25 2.60	18.00 22.95 2.55 2.95	20.80 25.80 3.10 3.45	21.30 26.30 3.20 3.65	22.30 27.30 3.35 3.80	22.90 27.90 3.50 4.00	30.00 35.00 4.05 4.55	30.50 35.50 4.20 4.75	31.00 36.00 4.30 4.80	31.50 36.50 4.40 4.90	32.10 37.10 4.50 5.00	33.60 38.60 4.60 5.10	36.80 41.80 4.80 5.30	39.25 44.25 5.00 5.50	42.50 47.50 5.20 5.70	45.80 50.80 5.40 5.90	
Montford Rubber Co., Buffalo, N. Y. May 2, 1922	N.S. Cord N.S. G.T. R.T.	c12.30 c18.25 1.90 2.40	c14.95 c25.80 2.25 2.80	d19.20 d25.80 2.55 2.95	c21.80 d29.50 3.10 3.45	d25.45 d32.45 3.20 3.70	d26.80 d33.55 3.35 3.80	d27.45 d34.55 3.50 4.00	d34.10 d42.65 4.05 4.55	d35.20 d43.80 4.20 4.75	d36.35 d44.80 4.30 4.80	d38.05 d46.15 4.40 4.90	d38.60 d47.05 4.50 5.00	d44.55 d53.25 5.00 5.50	d47.25 d55.90 5.20 5.70	d47.25 d55.90 5.30 5.80	d47.25 d55.90 5.40 5.90	d47.25 d55.90 5.50 6.00	
Murray Rubber Co., Trenton, N. J. Aug. 1, 1922	N.S. Cord N.S. G.T. R.T.	9.65 1.60 1.75	c10.65 1.80 2.00	d22.95 2.20 2.40	d26.45 2.25 2.45	d29.15 2.35 2.55	d30.05 2.45 2.65	d30.85 2.55 2.75	37.70 2.95 3.15	38.55 3.05 3.25	39.50 3.10 3.30	40.50 3.20 3.40	41.50 3.30 3.50	46.95 3.65 3.85	49.30 3.85 4.05	51.75 4.05 4.25	54.15 4.25 4.45		
Na Peer Tire Co., Nov. 1921 Akron, O.	N.S.		c10.50																
National Auto Supply Co., Allentown, Pa. Aug. 21, 1922	"Nasco" H-Tread Ex. Ply Cord N.S. G.T. R.T.	6.85 10.20 1.90 2.45	8.60 12.70 2.00 2.50	11.95 17.45 2.30 2.75	13.35 20.20 2.65 3.15	15.55 22.15 2.85 3.40	16.45 24.10 2.95 3.50	16.75 24.70 3.10 3.70	20.85 28.65 3.30 3.90	21.55 31.55 3.45 4.05	22.30 32.80 3.55 4.15	23.30 34.20 3.65 4.25	23.60 34.65 3.75 4.35	26.30 37.35 4.00 4.60	28.10 40.45 4.20 4.80	30.90 43.55 4.40 5.00	33.70 46.65 4.60 5.20	36.50 49.75 4.80 5.40	
National Tire & Rubber Co., East Palestine, O. Aug. 16, 1922	"Remington" N.S. "Roamer" G.T. Remington Ex. Heavy G.T.	2.00 1.90 2.25	2.25 2.25 2.15	2.55 2.55 2.55	3.10 3.10 3.45	3.20 3.55 3.70	3.35 3.70 3.90	3.50 3.85 4.00	4.05 4.40 4.65	4.20 4.55 4.80	4.25 4.60 4.85	4.30 4.65 4.90	4.40 4.75 5.00	5.00 5.35 5.60	5.20 5.55 5.80	5.40 5.75 6.00			
National Tire Co., Trenton, N. J. Nov. 15, 1921	"Black Diamond" N.S. "Black Diamond" Cord N.S. G.T. R.T.	c12.50 c19.90 2.40 1.90	c14.45 c26.70 2.80 2.25	d20.10 d26.70 2.95 2.55	d22.50 d29.20 3.45 3.10	d26.40 d33.00 3.70 3.30	d27.80 d34.40 3.80 3.40	d28.50 d35.90 3.90 3.50	d35.50 d43.90 4.60 4.05	d36.70 d44.80 4.75 4.20	d37.90 d45.90 4.85 4.30	d39.60 d47.20 5.00 4.45	d40.30 d48.30 5.10 4.55	d46.20 d54.50 5.30 4.75	d48.90 d57.30 5.50 4.95	d51.60 d60.20 5.70 5.15	d54.30 d63.10 5.90 5.35	d57.00 d66.00 6.10 5.55	
New England Tire & Rubber Co., Holyoke, Mass., Aug. 1, 1922	Cord N.S. "Holyoke" G.T.	c16.00 2.30	d22.95 2.60	d26.50 3.20	d29.20 3.30	d30.00 3.45	d30.85 3.60	d37.75 4.20	d38.60 4.35	d39.50 4.45	d40.70 4.50	d41.60 4.60	d47.00 5.15	d49.30 5.40	d51.60 5.60	d53.90 5.80	d56.20 6.00	d58.50 6.20	d60.80 6.40
New Tread Tire Co., East Palestine, Ohio Mar. 1, 1922	10,000 "Marvel" N.S. (8,000) "Eric" N.S. (6,000) "Service" N.S. Tubes	c13.75 c10.85 2.10	c20.40 c16.40 2.55	d25.80 d20.70 2.70	d29.25 d24.20 3.30	d33.70 d28.65 3.40	d35.10 d30.05 3.50	d36.35 d31.00 3.60	d39.95 d34.40 4.35	d41.65 d36.65 4.45	d42.85 d37.50 4.55	d44.90 d39.20 4.65	d45.75 d40.00 4.75	d51.30 d44.20 5.35	d54.65 d47.50 5.60	d58.00 d50.80 5.85	d61.35 d54.15 6.10	d64.70 d57.45 6.35	d68.05 d60.75 6.60
Norwalk Tire & Rubber Co., Norwalk, Conn. Nov. 2, 1921	P. N.S. Cord N.S. G.T. R.T.	c11.20 c11.75 1.85 2.35	c14.15 c17.50 2.25 2.40	d19.15 d26.00 2.55 2.80	c21.20 d30.00 3.10 3.45	d25.50 d33.00 3.20 3.65	d26.80 d34.50 3.35 3.80	d27.40 d35.10 3.40 3.90	d42.70 d4										



Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	36x6	38x7
Parker Tire & Rubber Co., Indianapolis, Ind., April 10, 1922	"Parker" Cord "Prestone" Cord			e20.75 c18.00	d29.35 d25.50	c33.80	d37.25	d38.40	d39.40	d48.20			*50.50	d52.00		*62.75			
Pennsylvania Rubber Co., Jeannette, Pa. July 5, 1922	Vacuum Cup Cord Vacuum Cup Fabric Ton-Tested G.T. Ton-Tested Ex. Heavy G.T. "Red Square" Cord		e10.15 1.85	d11.95 1.95	d15.00 2.20		d2.90 2.65	d3.05 3.05	d3.15 3.45	d3.30 3.60	d3.85 4.10	d4.30 4.40	d4.60 4.75	d5.20 5.40	d5.55 5.70	d5.75 6.00	d8.35 8.50	d12.00	
Perfection Tire & Rubber Co., Fort Madison, Ia. June 1, 1922	N.S. Cord N.S. "Thrill" Cord N.S. G.T. R.T.	10.95	13.75	19.15	22.05	25.45	26.80	27.35	34.05	35.20	36.25	37.95	38.50	42.15	44.75	46.60	46.60	90.90	121.50
Pharis Tire & Rubber Co., Newark, O. Nov. 15, 1921	N.S. Cord N.S. R. & G.T.	e10.95 2.40	c13.75 2.80	d19.15 3.05	e21.35 3.50	d24.95 3.70	d26.30 3.85	d26.85 4.00	d34.50 4.75	d35.65 4.90	d37.30 5.10	d38.50 5.25	d42.15 5.70	d44.75 6.00	d46.60 6.30	d46.60			
Powertown Tire Corp., Rochester, N. Y., Nov. 28, 1921	Rbd. & N.S. Tubes		23.30	32.50	38.40	39.10	39.80	41.00	49.70	51.90	53.10	54.70	56.80	61.00	63.20	66.10	95.00		
Prospect Tire & Rubber Co., Inc., (12,000) Buffalo, N. Y., July 29, 1922	Cord N.S. Cord Tubes		e15.95 2.80	d22.95 2.95	d26.45 3.45	d29.15 3.65	d30.05 3.80	d30.85 4.00	d37.70 4.65	d38.55 4.75	d39.50 4.90	d40.70 5.10	d41.55 5.30	d46.95 5.70	d49.30 6.00	d51.85 6.35			
Quaker City Rubber Co., Philadelphia, Pa. Aug. 1, 1922	N.S. G.T. Cord N.S. Cord G.T.	e10.95 2.00	d15.75 2.25	d16.30 2.55	d21.00 2.80	d21.20 3.10	d22.35 3.35	d22.80 3.50	d28.00 4.05	d28.00 4.20	d28.00 4.25	d28.00 4.30	d28.00 4.55	d28.00 5.00	d28.00 5.20	d28.00 5.45	d28.00	d115.50	
Racine Auto Tire Co., Racine, Wis. July 24, 1922	P. A.S. Cord Rbd. & H.S. G.T. Re-Cord T. "Commercial" Cord	10.35 10.80	11.65 18.00	18.40 27.50	19.25 27.50	23.90 33.00	25.20 34.00	25.80 35.00	35.80 42.35	35.80 43.40	35.80 44.85	35.80 46.10	35.80 47.10	35.80 53.00	35.80 54.75	35.80 58.75	35.80		
Racine Rubber Co., Racine, Wis. Aug. 4, 1922	Country Road N.S. Cord N.S. "Racine Trusty Tread" G.T. R.T.	11.00	11.85	15.60	16.80	20.75	21.80	22.25	29.95	30.85	31.90	33.40	33.80	39.15	41.45	41.45	78.55	113.85	
Republic Rubber Co., Youngstown, O. May 22, 1922	Fabric "Staggard" Grande Cord "Staggard" Blackline Red T. Grande Cord T.	e12.60	c14.95	d19.90	e21.80	d26.40	d27.80	d28.40	d44.35	d45.45	d46.60	d47.90	d48.95	d55.25	d58.00	d61.05			
Reynolds, W. C., 151 W. 35th St. N. Y. C., Nov. 20, 1921	Cord Tubes "Para" Cord		4.30		4.90	5.85	6.20	6.55	6.90	7.10	7.40	7.60	8.10	8.45	8.60	8.75			
Rubber Products Co., Barberton, O. June 15, 1922	N.S. Cord N.S. G.T. R.T.	e10.95	c13.75	d18.25	e20.15	d24.20	d25.50	d26.00	d40.20	d41.15	d42.40	d43.60		d54.75	d57.60				
Rubber Products Corp., "Black Stripe" Shelton, Conn. Oct. 1, 1921	T. "Arpeco" T.	3.35	3.50	4.05	4.40	4.90	5.20	5.45	5.65	6.00	6.85	7.25	7.60	8.15	8.60	9.00	13.05		
Rufenacht Rubber Co., Bucyrus, Ohio	N.S. Tubes		9.00																
Salem Rubber Co., Salem, Ohio July 20, 1922	N.S. Regular Cord Super Size Cord G.T.	e10.25	c13.00	d18.75	e20.65	d24.20	d25.45	d25.95	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85			
Samson Tire & Rubber Corp., Los Angeles, Calif. Aug. 10, 1922	S. O. S. N.S. R.T. Heavy Duty Cords N.S. Heavy Duty Tubes	e 9.65	c10.65	d16.30	e20.65	d24.20	d25.45	d25.95	d37.70	d38.55	d39.50	d40.70	d41.55	d46.95	d49.30	d51.85			
Seiberling Rubber Co., Akron, Ohio June 1, 1922	"Portage" N.S. "Portage" Cord N.S. "Seiberling" Cord Tubes	e 9.50	c10.50	d17.25	e18.00	d22.90	d24.10	d24.60	d32.10	d33.30	d34.50	d35.70	d36.90	d43.30	d44.50	d50.10	82.65		
S. H. Rubber Mfg. Co., "Winner" 1834 Broadway, N. Y. C., Nov. 5, 1921	R.T. G.T.	2.55	2.40	2.80	2.75	3.45	3.65	3.80	4.65	4.75	4.90	5.10	5.30	5.70	6.00	6.35	10.45		
Sioux City Tire & Mfg. Co., Sioux City, Iowa Aug. 1, 1922	Sioux/Rbd N.S. Sioux City/Rbd N.S. Cord N.S. G.T. R.T.	e 9.00	c 9.50	d10.00	e10.50	d11.00	e11.50	d12.00	d22.00	d22.75	d23.50	d24.25	d25.00	d30.50	d31.25	d32.00	d33.00	d34.00	d35.00
Smith Rubber & Tire Co., Garfield, N. J., May 1, 1922	Cord N.S. Tubes	16.75	18.00	25.50	29.40	32.40	33.40	34.35	41.90	42.85	43.90	45.20	46.15	52.15	54.75	57.60	82.80	115.65	
Spreckles "Savage" Tire Co., San Diego, Cal. Aug. 10, 1922	Cord Rbd. & N.S. "Standard" P. "Standard" Grip G.T. Grafite Tube R.T.	8.50 9.40	10.60 12.80	16.30 18.70	21.70	22.80	23.30	24.10	24.70	25.30	26.00	26.70	27.40	28.10	28.80	29.50	30.20	30.90	31.60
Standard Four Tire Co., Keokuk, Iowa Nov. 25, 1921	Rbd. & N.S. Cord Rbd. & N.S. G. & R.T. Dandy Line" T.	e12.00	c12.25	d14.90	e19.15	d21.75	d25.40	d26.75	d27.35	d34.05	d35.15	d36.30	d38.00	d38.50	d43.50	d45.00	d47.20		



## TIRE PRICE LIST—CONT.

OCTOBER, 1922

Name	Trade Name and Tread	28x3	30x3	30x3½	32x3½	31x4	32x4	33x4	34x4	32x4½	33x4½	34x4½	35x4½	36x4½	33x5	35x5	37x5	36x6	38x7
Standard Tire Co., Willoughby, Ohio Aug. 10, 1922	"Standard" Fabric "Tiger Foot" Cord G.T. R.T.		9.65 1.90 2.40	13.00 2.25 2.80	16.30 2.55 2.95	20.65 3.10 3.45	21.20 3.20 3.65	22.35 3.35 3.80	22.85 3.50 4.00	37.50 4.05 4.65	38.55 4.20 4.75	39.50 4.25 4.90	40.90 4.30 5.10	41.55 4.45 5.30	46.95 5.00 5.70	49.30 5.20 6.00	51.85 5.45 6.35		
Star Rubber Co. Akron, O Aug. 5, 1922	Comet Fbr Star Fbr Meteor Cord G.T. R.T.		c10.75 c11.25 1.90 2.40	c11.75 c14.85 c16.60 2.25 2.80	d19.85 d19.85 d27.95 2.55 2.95	c19.90 c19.90 d29.55 3.10 3.45	d31.95 d31.95 d32.90 3.20 3.65	d32.90 d32.90 d33.85 3.35 3.80	d40.65 d41.45 d42.40 4.05 4.65	d41.45 d42.40 d43.35 4.20 4.75	d42.40 d43.35 d44.45 4.25 4.90	d43.35 d44.45 d50.20 4.30 5.10	d44.45 d50.20 d52.50 4.45 5.30	d50.20 d52.50 d54.00 5.00 5.70	d52.50 d54.00 d58.10 5.20 6.00	d54.00 d58.10 d61.00 5.45 6.35	d61.00 d67.20 14.20		
Sterling Tire Corp., Rutherford N. J. Aug. 15, 1922	"Vacuum Tread" Fabric Cord "Sovereign" Cord Tubes		c13.40 c14.00 2.40	c15.60 c16.50 2.80	d22.95 d22.95 2.95	c19.70 c19.70 3.45	d29.15 d29.15 3.65	d30.05 d30.05 3.80	d30.85 d30.85 4.00	d37.70 d38.55 4.65	d38.55 d39.50 4.75	d39.50 d40.70 4.90	d40.70 d41.55 5.10	d41.55 d46.95 5.30	d46.95 d49.30 5.70	d49.30 d51.85 6.00	d51.85 d58.10 6.35	d58.10 d86.80 9.25	
Studebaker-Wulff Rubber Co., Marion, Ohio June 24, 1922	"Marion" N.S. "S. W." Cord & N.S. G.T. R.T.		c10.95 c18.00 1.90 2.40	c13.00 c18.00 2.25 2.80	d17.50 d25.50 2.55 2.95	c19.50 c19.50 3.10 3.45	d23.00 d32.40 3.20 3.65	d24.00 d34.25 3.35 3.80	d24.50 d34.25 3.50 4.00	d41.90 d42.85 4.20 4.65	d42.85 d43.90 4.25 4.75	d43.90 d44.45 4.30 4.90		d52.15 d54.75 5.00 5.70	d54.75 d58.10 5.20 6.00				
Sturges Tire & Rubber Co., Oakland, Calif. Sept. 1, 1922	N.S. Cord N.S. Tubes		10.00 2.16	11.00 2.68	21.04 22.95 2.88	d23.13 d26.50 3.36	26.56 29.20 3.44	27.84 30.15 3.60	28.35 30.85 3.72	32.76 37.75 4.63	33.75 38.75 4.76	34.79 39.60 4.93	36.27 40.75 5.02	43.74 47.05 5.23	45.76 49.50 5.99	48.76 51.95 6.25			
Swinehart Tire & Rubber Co., Akron, Ohio Aug. 15, 1922	Hexagon Fbr G.T. TNT Cord Cord G.T.	1.90	c12.35 2.00	d14.90 2.25 2.00	d18.35 2.55 2.25	d21.00 3.10 3.10	d24.30 3.25 3.70	d25.20 3.35 3.85	d26.15 3.50 4.00	4.00 4.10 4.75	4.10 4.20 4.90	4.20 4.30 5.10	4.30 4.40 5.25	4.40 4.55 5.40	5.10 5.25 5.70	5.25 5.45 6.00	5.25 5.80 6.30	5.25 5.80 11.60	
Syracuse Rubber Co. Syracuse, N. Y. Aug. 1, 1922	"Syra"-Fabric "Syra"-Cord G.T. Red Antimony T.		c11.70 1.90 2.30	c12.60 c16.75 2.25 2.70	d22.95 d22.95 2.55 3.05	d26.45 d26.45 3.10 3.70	d29.15 d29.15 3.20 3.85	d30.05 d30.05 3.35 4.00	d30.85 d30.85 3.50 4.20	d37.70 d38.55 4.05 4.85	d38.55 d39.50 4.20 5.05	d39.50 d40.70 4.30 5.15	d40.70 d41.55 4.35 5.20	d41.55 d46.95 4.55 5.45	d46.95 d49.30 5.00 6.00	d49.30 d51.85 5.25 6.30	d51.85 d58.10 5.45 6.55	d58.10 d78.55 11.20 15.20	
Thermoid Rubber Co., Trenton, N. J. Jan. 20, 1922	Ribbed N.S. Cord Ribbed & N.S. De Luxe R.T. G.T.		c13.10 c13.60 2.20 2.00	c15.00 c15.35 2.50 2.35	d19.60 d20.60 2.80 2.65	c21.80 c22.80 3.25 3.15	28.00 29.10 33.05 3.25	29.00 30.40 34.10 3.40	30.00 31.60 34.95 3.50	35.00 36.70 42.75 4.40	36.70 37.90 44.80 4.60	37.90 39.10 46.10 4.70	38.90 40.85 46.10 4.80	41.00 43.00 53.20 5.50	42.50 44.65 55.80 5.60	48.50 50.85 58.75 5.80	50.85 53.75 58.75 6.00	53.75 58.75 84.30 10.15 14.25	
Trautwein Corp., Brooklyn, N. Y., Aug. 26, 1922	Cord R.T. Extra Heavy Cord T		c17.25 2.45 3.80	d22.95 2.90 3.80	d26.45 3.05 4.15	d29.15 3.35 4.75	d30.05 3.30 4.95	d30.85 3.50 5.25	d37.70 4.10 5.55	d38.55 4.25 6.00	d39.50 4.30 6.20	d40.70 4.35 6.40	d41.55 4.45 6.65	d46.95 4.55 6.90	d49.30 4.75 7.95	d51.85 4.95 8.30	d58.10 5.25 8.70		
Trent Rubber Co., Trenton, N. J. Nov. 15, 1921	N.S. Cord N.S. R.T. G.T.		10.95 18.00 2.40 2.15	13.75 18.00 2.80 2.50	19.15 25.50 3.25 2.65	21.35 26.00 3.45 3.10	24.95 32.40 3.65 3.30	26.30 34.40 3.80 3.40	26.85 34.25 4.00 3.60	33.40 41.90 4.65 4.20	34.50 42.85 4.75 4.40	35.65 43.90 4.90 4.60	37.30 45.20 5.10 4.80	37.80 46.15 5.30 5.00	41.20 52.15 5.70 5.40	43.50 54.75 6.00 5.75	45.75 57.60 6.35 6.00		
Triumph Tires 226 W. 56th St., New York City June 15, 1922	"Triumph" N.S. "Triumph" Cord N.S. "Timesco" N.S. "Timesco" Cord N.S. Tubes Cord Tubes		7.75 8.85 6.85 1.55 1.95	8.65 11.95 8.25 1.65 2.10	11.75 15.25 10.80 1.95 2.45	12.95 19.45 11.45 2.20 2.80	13.95 19.95 13.20 2.45 2.90	14.25 20.95 13.85 2.65 3.15	14.85 21.65 14.20 2.85 3.35	15.00 26.95 15.00 3.10 3.55	15.00 27.45 15.00 3.20 3.65	15.00 28.45 15.00 3.25 3.75	15.00 29.95 15.00 3.35 3.85	15.00 30.95 15.00 3.45 4.00	15.00 32.00 15.00 3.55 4.10	15.00 33.00 15.00 3.65 4.25	15.00 33.95 15.00 3.75 4.40	15.00 34.95 15.00 3.85 4.55	
Tropical Tire & Rubber Co., 365 Broadway, N. Y. City Aug. 15, 1922	N.S. Cord N.S. R.T.		11.40 1.70	10.50 12.45 2.05	16.90 22.95 2.25	21.35 26.45 2.95	22.45 29.15 3.05	23.65 30.85 3.20	24.15 30.85 3.35	30.05 37.70 3.95	31.05 38.55 4.10	32.05 39.50 4.20	33.55 40.70 4.25	34.00 41.55 4.35	39.30 46.95 4.75	41.70 49.30 5.15	45.85 51.85 5.35		
Tuscan Tire & Rubber Co., Carrollton, O. Dec. 1, 1921	6,000 N.S. 8,000 Cord N.S. Tubes		c12.35 2.40	c14.75 c20.75 2.80	d19.15 d25.50 3.10	c22.00 c22.00 3.50	d25.45 d32.40 3.70	d26.80 d33.40 3.85	d27.85 d34.25 4.00	d41.90 d41.90 4.75	d42.85 d42.85 4.90	d43.90 d43.90 5.10	d45.20 d45.20 5.25	d46.15 d46.15 5.40	d52.15 d52.15 5.70	d54.75 d54.75 6.00	d57.60 d57.60 6.30		
Tyer Rubber Co., Andover, "Tyrian" Nov. 15, 1921	Cord N.S. N.S. G.T. R.T.		c10.35 1.90 2.40	c12.50 17.75 2.25 2.80	d19.00 c19.00 2.55 3.10	d23.60 c23.60 3.10 3.45	d23.60 c23.60 3.20 3.70	d24.85 c24.85 3.35 3.80	d25.35 c25.35 3.50 4.00	d30.50 c30.50 4.05 4.60	d31.85 c31.85 4.20 4.75	d33.65 c33.65 4.30 4.90	*35.15 c35.15 4.40 5.10	*35.75 c35.75 4.55 5.30	d52.15 c52.15 4.75 5.70	d54.80 c54.80 5.00 6.00	*43.80 c43.80 5.25 6.35	9.00	
U. & G. Rubber Mfg. Co. (6,000 miles) Trenton, N. J. Jan. 1, 1921	P. N.S. (8,000 miles) Cord N.S. "Safety" G.T. R.T.		c15.00 c16.80 2.70 3.30	c18.50 c20.00 3.10 3.85	d22.15 d22.15 3.60 4.15	c25.80 c25.80 4.30 4.70	d30.30 c30.30 4.45 4.95	d31.65 c31.65 4.65 5.15	d33.00 c33.00 4.85 5.35	d41.85 c41.85 5.65 6.25	d42.80 c42.80 5.85 6.45	d43.90 c43.90 6.05 6.65	d45.10 c45.10 6.25 6.85	d46.15 c46.15 6.45 7.05	d52.15 c52.15 6.75 7.35	d54.80 c54.80 7.05 7.65	d57.50 c57.50 7.35 7.95		
U. S. Compression Inner Tuber Co. Tulsa, Okla. Nov. 22, 1921	"Tulsa" Cord N.S. N.S. Cord T. T.	13.05 9.60	14.85 10.20	22.00 12.00 10.80	22.30 13.80 12.60	26.25 14.40 13.20	27.55 15.20 14.40	28.05 16.00 15.00	38.40 17.20 15.60	41.20 17.80 16.20	42.00 18.40 16.80	43.20 18.80 17.20	44.00 19.20 17.60	45.20 19.60 18.00	51.20 22.80 20.40	53.60 24.80 22.40	56.80 27.60 25.00	58.00 29.00 26.40	60.00 30.00 27.60
United States Tire Co., 1790 Broadway, N. Y. C. July 29, 1922 "Stalwart" "Granite," "G. & J." "Revere," "Nobby Tread," "Hartford," "Royal"	P. Usco Tread Chain Trea Nobby Tread Royal Cord Royal Tube G.T.		c 9.25 c 9.75 c11.40 c12.55 2.45 1.95	c10.65 c13.00 c15.60 c14.60 2.90 2.30	d15.70 d16.90 d20.45 d22.95 3.05 2.60	c18.65 c21.35 c23.40 c24.35 3.55 3.20	d20.85 d22.45 d24.35 d25.55 3.80 3.40	d21.95 d23.65 d25.05 d26.05 4.10 3.70	d22.40 d24.15 d26.05 d27.05 4.20 3.80	d30.05 c31.95 d33.00 d33.55 4.75 4.20	d31.05 c33.00 d35.00 d35.55 4.90 4.45	d32.05 c34.00 d36.00 d36.55 5.05 4.60	d33.55 c35.00 d37.00 d37.55 5.25 4.80	d34.00 c36.15 d38.00 d38.55 5.45 5.00	d39.30 c41.30 d43.20 d43.75 5.85 5.40	d41.70 c43.80 d45.75 d46.30 6.20 5.75	d43.75 c46.30 d48.75 d49.30 6.55 6.10	d45.75 c48.75 d50.75 d51.30 6.85 6.40	
Victor Rubber Co. Springfield, O. Nov. 15, 1921	Rbd. & N.S. Cord Rbd. Vulcan G.T. Spec R.T.		12.35 1.90 2.15	14.75 19.00 2.55	19.15 26.35 2.90	22.05 30.95 3.45	25.45 34.10 4.15	26.80 35.65 4.40	27.35 36.05 4.55	34.05 40.90 5.55	41.85 42.85 5.75	42.90 43.90 5.85	44.10 45.20 6.10	46.15 46.15 6.40	52.15 52.15 6.90	53.50 54.75 7.25	56.25 57.60 7.60	58.25 59.60 8.00	60.00 61.40 8.40
Virginian Rubber Co., Charleston, W. Va. Jan. 1, 1922	(6,000) N.S. Cord N.S.		12.35	14.70 18.30	18.55 25.75	20.25	24.75 32.50	26.00 33.50	26.50 34.50	31.75 42.70	3								



### Tire and Rim Assn. of America to Continue Activities of Tire and Rim Assn.

An event of interest to the Automobile Industry occurred recently, when the meeting of the incorporators of the Tire and Rim Association of America, Inc., was held. This new body takes over and continues the activities of the Tire and Rim Association, and provides for complete representation of the tire, rim, wheel and related parts industries.

In the early days of the automobile, many tire manufacturers produced their own rims, and in several instances tires of other makes would not fit these rims. As the industry grew, the manufacture of rims was taken up as a separate enterprise, and it soon became evident that standardization was imperative in order to provide complete interchangeability of all makes of tires on all makes of rims.

To accomplish this the Clincher Automobile Tire Manufacturers' Association was formed and a line of standard rims worked out. Inspectors were placed in every rim plant and the official stamp of the association on rims became a guarantee that all makes of tires would fit them. The association was managed by the executive heads of the member companies and minutes of meetings carried the names of such well known figures as F. A. Seiberling, then president of the Goodyear Tire & Rubber Company, and now president of the Seiberling Rubber Company; C. J. Butler, president of Morgan & Wright, and now also vice president of the United States Rubber Company; H. S. Firestone, president of the Firestone Tire & Rubber Company; John Kelsey, president of the Kelsey Wheel Company, and others.

In 1917 the name was changed to the Tire and Rim Association, and its management devolved upon the technical executives of the member companies. During the war the association rendered valuable assistance to the government in working out a standardization program to reduce the number of tire sizes and types. The economies resulting from this work were enjoyed by all branches of the related industries and gave a great impetus to the tire standardization movement of today.

The Tire and Rim Association of America, Inc., provides for membership from the tire, rim, wheel and related parts industries, and is governed by a Board of Directors composed of fifteen members. Seven of these represent tire manufacturers, four rim, three wheel and one the related parts manufacturers. Election of directors resulted as follows:

Tires.—Firestone Tire & Rubber Co., J. E. Hale; Fisk Rubber Co., J. D. Anderson; B. F. Goodrich Co., W. H. Allen; Goodyear Tire & Rubber Co., B. Darrow; Hood Rubber Co., E. O. Fritch; Miller Rubber Co., C. F. Offensend; United States Rubber Co., S. P. Thacher.

Rims.—Hayes Wheel Co., J. H. Wagonhorst; Jaxon Steel Products Co., W. B. Minch; Kelsey Wheel Co., Ford Lawrence; Standard Parts Co., John Younger.

Wheels.—Budd Wheel Co., P. Pleiss; Motor Wheel Corp., C. C. Carlton; Wire Wheel Corp. of America, O. J. Rohde.

Related Parts.—A. Schrader's Son, Inc., W. J. Kirkpatrick.

The first meeting of the Board of Directors was held immediately after the meeting of the incorporators and the following officers were elected: President, S. P. Thacher; vice president, John Younger; secretary, C. A. Thompson; treasurer, H. W. Kranz.

Mr. Thompson also remains as General Manager and C. E. Bonnett as Chief Rim Inspector.

The new association covers the entire field of tire and rim standardization, while continuing the work of rim inspection and its plans include close co-operation with other bodies engaged in related work. Its immediate goal is the enrolling in its membership of every tire, rim, wheel and related parts manufacturer in the United States and Canada. In addition to the home office of the corporation, in Hartford, the new association will continue to use the offices occupied by the Tire and Rim Association in the Leader-News Building, Cleveland, Ohio.

### Paige Brings Out Special Jewett Model

Realizing that paint and trim give a car the individuality that often makes a satisfied customer out of a luke warm prospect, the Paige Motor Car Co. has added to its Jewett line a "special" in the touring model.

The new job mounted on the standard 50 horsepower Jewett chassis, has the body and hood finished in mole-skin gray. The color, besides being dust proof in character, brings out the straight lines of the body. A nickeled radiator shell and Tuarc disk wheels are fitted, the wheels being finished in the gray of the body with a touch of scarlet at the hubs, and nickeled rims. Outside valve stems furnish wood wheel convenience with disk wheel beauty.

Harmonizing with the gray of the body, the upholstery is a gray green Spanish leather, laid over deep sprung cushions. The upholstery gives the final touch of smartness which marks the car as a special in color and finish. Standard black running gear and fenders are fitted.

This model, with special finish, wheel equipment, and upholstery, lists at \$1,095, or \$100 more than the standard blue Jewett, with black leather upholstery and wood wheels.

### Gernandt Oil Engine Developed by Bendix

Vincent Bendix, president of the Bendix Engineering Works, of Chicago, and also the inventor of the Eclipse-Bendix drive, announces that his company has developed the Gernandt oil engine, designed for use in automobiles, motor-boats and locomotives, to the point where it can be offered to the industry. The Bendix company will not manufacture the engine but license its manufacture by others.

Bendix, Waldo G. Gernandt and Charles Bathrick have been working on this engine for the past five years and the design is protected by a series of basic patents.

### George P. Smith Chosen Head of Mercer Motors

At a meeting of the board of directors of the Mercer Motors Co., Trenton, N. J., George P. Smith, of Smith & Gallatin, brokers of New York City, was elected president to fill a vacancy which has existed since the company severed relations with Hares Motors.

R. W. Barnus was chosen vice-president in charge of production and finance to succeed H. E. Barthel, resigned. Barnum was formerly vice-president and general manager of the Barnum-Richardson Co., iron manufacturer of Lime Rock and East Canaan, Conn., and for the last three years has served as general manager of the body department of Mercer Motors in New Haven.

W. A. Smith was elected vice-president in charge of sales and service. He has been connected with the company in various capacities for the last twelve years, and for the last year and a half has served as general sales manager.



# Dealers in Parts for Orphan Cars

Parts for Orphan Cars are Carried by the Dealers Listed on Opposite Page. The Numbers Immediately Following the Name of the Car Correspond to the Numbers Preceding Name of the Dealer Who Carries Parts for That Particular Car.

Abbott .....123-136-144	Courier .....1-8-9-62-123-136-142-143-103	Henderson .....8-9-25-123-144	Moore .....123	Royal-Tourist 10-123-132
Acme .....123	Courier-Clermont .....123-143	Henry .....8-9-64-107-123	Mora .....64-120	Rush Truck .....90
Adams Truck .....93	Courier-Glide .....99	Herff-Brooks .....76	Moyer .....8-9-123	Russell .....8-9
Aerocar .....1-8-9-123	Craig-Toledo .....38-123	Herreshoff .....2-64-123		
Alco .....33-123	Crescent .....8-9-123		Nance .....64	Sampson ..9-123-136-143
Alden-Sampson .....123-143	Cricket .....123	Imperial .8-9-108-123-144	Northern .....123	Samson .....8
Allen .....5	Crow .....8-9-44-123	Indiana .....123	Northwestern .....123	Sandusky .....46
Allis-Chalmers .....123	Croxton .....9-123	Interstate .....114	Nyberg .....9-123	Savoy .....22-136
Alpena .....64-123	Croxton-Keeton ..8-123			Saybrook .....22-136
Alter .....2-123	Cutting ....8-9-55-62-71-123-162-163			Schacht ..8-9-62-123-137
American 2-8-9-93-99-123		Jeffrey .....103	Ohio .....8-9-123-163	Scripps-Booth Cycle Car .....123
American Mors .....135	Dart .....123	Jenkins .....123	Oliver .....123	Selden ..8-9-62-64-99-123
Ames .....8-9	Dayton .....123	Johnson .....78	Omaha .....9-123	S. G. V. ....123
Amplex .....64-99-123	Dearborn-Detroit ..123		Orient .....100	Sheridan .....109
Anchor .....3	Deere-Clarke .....90	Keeton .....123-144	Oswald .....12	Shaw .....152
Anhut .....123	De Kalb .....123	Kelsey .....85	Otto .....79	Silent-Knight .....162
Argo .....10-67-99-123	De Luxe .....123	Kermath .....123	Owen .....123	Southern .....123-141
Atlantic .....123	De Mot .....123	Knox .....86		Spaulding .....123
Atlas .....8-9-11-64-99-123	Deschaum .....123	Komet .....84-123		Speedwell .....9-123
Autocar .....7	De Sota .....170	Krall .....123	Packers .....123	Sphinx .....8-9-167
Autocrat .....99	De Tamble ..2-8-9-48-123	Krit .....9-123-144	Paige (3 cyl.)...13-123	Springfield .....73
Avery .....10	Detroit-Chatum .....123		Palmer-Moore .....106	Standard-Six .....8-9-123-135
	Dragon .....120-123	Lambert .....2-10	Palmer-Singer .....9-64-123-139	Star .....104-123
Babcock .....20-64-123	Duer .....34	Lane Truck .....83	Panhard .....21	Staver ....8-9-10-123-145
Badger .....8-9-123-138	Durocar .....123	Lenox .....9-123	Parry .....8-9-10-118-123-142	Sterling .....84-123
Barnes .....123	Eclipse .....123-157	Lewis .....2-123	Partin-Palmer. 13-41-136	Stevens-Duryea .....103-116-123-146-147-148-182
Benham .....64-123	Economy .....12	Lincoln Truck .....70	Pathfinder ....2-103-118	Stoddard-Dayton ..9-22-123-143
Bergdoll ..8-9-10-24-64-90-99	Edwards .....123	Little-Four .....9-123	Paulding .....4	Stratford .....22-136
Berkshire .....8-9-123	Elco .....2	Little-Six .....123	Peabody .....123	Suburban .....8-9-123
Berliet .....123	Elk .....123	Logan .....61-65	Penn .....8-9-25-123	Sultan .....64-123
Bessemer .....45-123	Elmore .....8-9-64-123	Lozier (old) ....94-123	Pennsylvania .....123	Sun .....14
Bimel .....2-123	E. M. F. ....149	L. P. C. ....2	Peru .....123	
Black-Crow .....44	Empire .....10-53-123-167	Luverne (1913)....8-9	Petrel .....43-58	Thomas ....8-9-99-123-142-156
Blomstrom .....123	Enger .....2-8-10-54-136	Lyons-Knight .....162	Pierce-Racine ....31-123	Thomas-Detroit ....123
Borland .....123	Everitt .....123-136-143		Pope-Hartford ...43-62-72-99-123-131-136-160	Tincher .....34
Bourne-Magnetic ....6	Ewing .....64-123	Mais Truck .....2	Pope-Toledo .....99-123	Touraine .....64
Briggs-Detroit ..90-123		Marathon .....8-62-97-123-136	Pope-Tribune ....72-123	Tourist .....26-123
Brintell .....123	F. A. L. ....8-123	Marion ...2-9-64-93-108-123-150	Poss .....10-123	Trumbull .....90
Broc (elec.) .....123	Fawick .....161	Marion-Handley ..64-108	Pratt-Elkhart .....52	Twombly .....49-123
Brodesser .....123	Firestone-Columbus ..8-9-115	Marquette .....123	Pullman ...10-13-24-62-90-92-101-103-121-123-136-167	
Brown-Commercial ..67	Flanders .....149	Marron .....123	Pungs-Finch ....122-123	Universal Truck....95
Browniekar .....75	Fuller .....77	Marvel .....123		Van Dyke .....123
Brush ..22-64-123-142-143	Gaeth .....60	Mason ...55-123-136-144	Queen .....123	Virginian .....8-9
Buffalo (elec.) .....123	Garford .....10-61-123	Mather .....123		
Burch .....114	Geneva Truck .....68	Matheson .....98-123		Waco .....66
	G. J. G. ....64-123	Maxwell-Briscoe .1-103-143		Wagenhalls .....123-130
California .....123	Gleason .....23	Maxwell (old) ...1-8-9-13-62-103-114-123-136-143	Rainier .....61-123	Wahl .....123
Cameron .....30	Glide .....10-15	Maytag .....123-144	Rambler .....1-10-43-99-103-162-163	Walters .....8-9
Carhartt .....8-9-64-123	Grabowski .....64-123	McIntire .....123	Randolph .....47-123-127	Waltham-Orient ...100
Car Nation .....8-9-123-144-152	Gramm .....61-123	Merchant .....123	Rapid .....123	Warren .....9-64-123
	Gramm-Logan .....61	Meteor .....8-9-123-136	R. C. H. ....8-10-64-103-120-123-126-136-162	Washington .....123
Cartercar .....10-123-142	Great Smith .....23	Metzger .....123-143	Reading .....63-123	Waverley (elec.) ...93
Carthage .....123	Great Western ..8-9-67-99-123	Michigan .....8-9-46-64-120-123-144	Reed .....123	Wayne .....123
Century .....123	Green Dragon .....12	Middleby .....63-91-123	Regal .....10-62-90-103-123-136	Welch-Detroit .....123
Chadwick .....32	Grout .....123-128	Midland ..8-9-24-90-92-99-101-114-123	Reliable-Dayton ...123	Welch-Pontiac .....123
Cinco .....123		Midland Truck .....102	Reliance .....123	Western .....123
Cino .....123-124	Hal .....144	Mier .....104	Republic (passenger car) ..8-129	White Steamer .....1
Clark .....35-123	Halliday .....9-99	Miller .....9-123	Richmond .....103	Whiting .....9-123
Clark-Carter ..45-55-123	Hart-Kraft .....119	Milwaukee .....55-71	Rider-Lewis .....93-123	Wisconsin Truck...110
Cleveland .....61	Hassler .....74	Modern Truck .....151	Ross .....67	Woodworth .....123
Coates-Goshen. 36-64-105	Havers .....8-64-123	Monarch .....123		
Colburn .....37-123	Hazard .....123			Yale .....123
Colby .....123				Zimmerman .....8-9-43
Columbia-Hartford ..39-123-143				Zip .....23-162
Columbus .....62				
Columbus (elec.) ...115				
Columbus Gasoline ..40				
Connersville .....123				
Continental .....123-163				
Corbin .....42				
Corbitt .....123				
Correia .....8-9-64-136				



1. Akeley-Steele Co., 79 Galena Blvd., Aurora, Ill.
2. American Motor Parts Co., Indianapolis, Ind.
3. Anchor Buggy Co., Cincinnati, Ohio.
4. Anchor Motor Car Co., St. Louis, Mo.
5. Allen Motor Service Co., 2200 Diamond St., Phila., Pa.
6. Atlantic Refining Co., Phila., Pa.
7. Autocar Co., Ardmore, Pa.
8. Auto Gear Co., 844 Eighth Ave., N. Y. City.
9. Auto Gear & Parts Co., Atlanta, Ga.
10. Auto Parts Co., St. Louis, Mo.
11. Automobile Sales Co., Springfield, Mass.
12. Auto Salvage Co., Inc., Kansas City, Mo.
13. Auto Tire & Parts Co., Cape Girardeau, Mo.
14. Automotive Corp., Toledo, Ohio.
15. Avery Co., Peoria, Ill.
20. Babcock Mfrs.' Sup. Co., Watertown, N. Y.
21. Babel, L., 371 E. 39th St., Chicago, Ill.
22. Barney's Auto Parts Co., 236 W. 50th St., N. Y. City.
23. Bauer Mach. Wks., Kansas City, Mo.
24. Bergdoll Co., Louis J., Phila., Pa.
25. Buda Co., Harvey, Ill.
26. Burt Motor Car Co., Los Angeles, Calif.
30. Cameron Motors Corp., s Columbus Circle, N. Y. City.
31. Case Threshing Mch. Co., J. L., Racine, Wisc.
32. Chadwick Engrg. Works, Pottstown, Pa.
33. Chandler, Ralph J., 526 So. Flower St., Los Angeles, Cal.
34. Chicago Coach & Carr. Co., Chicago, Ill.
35. Clark Motor Car Co., Shelbyville, Ind.
36. Coates-Goshen Auto Co., Goshen, N. Y.
37. Colburn Automobile Co., Denver, Colo.
38. Colter, A. W., Toledo, Ohio.
39. Columbia Auto Rep. Co., Hartford, Conn.
40. Columbus Buggy Parts Co., Columbus, Ohio.
41. Commonwealth Motors Co., 326 W. Madison St., Chicago, Ill.
42. Corbin Motor Vehicle Co., New Britain, Conn.
43. Council Bluffs Auto Parts Co., Council Bluffs, Iowa.
44. Crow-Elkhart Motor Co., Elkhart, Indiana.
45. Cutting Co., Robt. M., Chicago, Ill.
46. Dauch Mfg. Co., Sandusky, Ohio.
47. DeKalb Wagon Co., DeKalb, Ill.
48. DeTamble Motors Co., Indianapolis, Ind.
49. Driggs-Seabury Ordnance Co., Sharon, Pa.
50. Douglas Motors Corp., Omaha, Neb.
52. Elkhart Carriage & Motor-Car Co., Elkhart, Ind.
53. Empire Automobile Co., Indianapolis, Ind.
54. Enger Motor Car Co., Indianapolis, Ind.
55. Erbes, L. C., 2654 W. University Ave., St. Paul, Minn.
58. Filer & Stowell, Milwaukee, Wisc.
60. Gaeth Motor Car Co., Cleveland, Ohio.
61. Garford Motor Truck Co., Lima, Ohio.
62. Genesee Auto Wrecking Co., 430 Genesee St., Buffalo, N. Y.
63. Goldberg, H., 1420 So. 8th St., Phila., Pa.
64. Gorey & Co., Jos. C., 354 W. 50th St., N. Y. City.
65. Gramm Motor Truck Co., Lima, Ohio.
66. Grant Mach. Works, 5401—53rd Ave. So., Seattle, Wash.
67. Great Western Auto Co., Kalamazoo, Mich.
68. Geneva Wagon Co., Geneva, N. Y.
70. Hannon, J. E., 24 Mass. Ave., Detroit, Mich.
71. Harris Bros. Co., Chicago, Ill.
72. Hartford Motor Car Co., Hartford, Conn.
73. Hass Elec. & Mfg. Co., R., Springfield, Ill.
74. Hassler Motor Car Co., Indianapolis, Ind.
75. Hinsdale Elec'l Sup. Co., Hinsdale, Ill.
76. Holzapfel & Son, Henry, Richmond, Ind.
77. Jackson Motors Corp., Jackson, Mich.
78. Johnson Service Co., Milwaukee, Wis.
79. Jones, Mark W., 53rd & Lansdowne Ave., Phila., Pa.
83. Kalamazoo Motors Corp., Kalamazoo, Mich.
84. Keith Bros., Elkhart, Ind.
85. Kelsey Motor Co., Hartford, Conn.
86. Knox Motors Co., Springfield, Mass.
90. Levene Motor Co., Phila., Pa.
91. Levengood, A. J., 153 N. 4th St., Reading, Pa.
92. Lion Motor Parts Co., Phila., Pa.
93. Longaker Co., V. A., Indianapolis, Ind.
94. Lozier Motor Car Co., Detroit, Mich.
95. Mansfield Steel Corp., Detroit, Mich.
97. Marathon Service Co., Nashville, Tenn.
98. Matheson Co., Frank F., Wilkes-Barre, Pa.
99. Maxwell Bros. Auto Salvage Co., St. Louis, Mo.
100. Metz-Friction Service, Waltham, Mass.
101. Midland Motor Co., Phila., Pa.
102. Midland Motor Car & Truck Co., P. O. Box 152, Oklahoma City, Okla.
103. Mid-West Auto Parts Co., 1318 W. B'way, Council Bluffs, Iowa.
104. Mier Carriage & Buggy Co., Ligonier, Ind.
105. Miller Car Co., Goshen, N. Y.
106. Moffitt's Sons, B. O., Binghamton, N. Y.
107. Muskegon Auto Co., Muskegon, Mich.
108. Mutual Motors Co., No. Tonawanda, N. Y.
109. Olds Motor Works, Lansing, Mich.
110. Myers Machine Co., Sheboygan, Wis.
114. Nebraska Iron & Metal Co., 122 Norfolk Ave., Norfolk, Nebr.
115. New Columbus Buggy Co., Columbus, Ohio.
116. Newton Co., J. E., 165 Bedford St., Fall River, Mass.
118. Pathfinder Co., Indianapolis, Ind.
119. Petrie & Morgenthall, Greencastle, Pa.
120. Phila. Mach. Wks., Phila., Pa.
121. Pullman Motor Car Co., York, Pa.
122. Pungs-Finch Auto & Gas Eng. Co., Detroit, Mich.
123. Puritan Mach. Co., Detroit, Mich., and N. Y. City.
124. Queen City Auto Parts Co., 638 Main St., Cincinnati, Ohio.
126. R. C. H. Corp., Detroit, Mich.
127. Randolph Motor Truck Co., Flint, Mich.
128. Red Arrow Auto Co., Orange, Mass.
129. Republic Motor Car Co., Youngstown, Ohio.
130. Riverside Mchy. Depot, Detroit, Mich.
131. J. Rosenfield, 521 Sixth St., So. Boston, Mass.
132. Royal Tourist Co., 72nd St. & St. Clair Ave., Cleveland, Ohio.
135. St. Louis Car Co., St. Louis, Mo.
136. Saunders, Ernest W., 27 Stanhope St., Boston, Mass.
137. Schacht Motor Truck Co., G. A., Cincinnati, Ohio.
138. Schultz & Harder, Columbus, Wisc.
139. Singer Motor Co., 102 West End Ave., N. Y. City.
141. Southern Auto & Equip. Co., Atlanta, Ga.
142. Southern Welding Co., Waco, Tex.
143. Standard Motor Parts Co., Newcastle, Ind.
144. Standard Motor Parts Co., Detroit, Mich.
145. Staver Co., 106 W. 55th St., Chicago, Ill.
146. Stevens Duryea Co., Chicopee Falls, Mass.
147. Stevens Duryea Co., 72—12th St., San Francisco, Calif.
148. Stevens Duryea Service, Inc., 219 E. 67th St., N. Y. City.
149. Studebaker Corp. of America, Detroit, Mich.
150. Stutz Motor Car Co., 2450 Mich. Ave., Chicago, Ill.
151. Y. F. Stewart Motor Car Co., Bowling Green, Ohio.
152. Shaw Auto Sales Co., 513 W. 50th St., New York.
156. Thomas Motor Car Co., E. R., Buffalo, N. Y.
157. Toepfer's Sons, Frank, Milwaukee, Wisc.
160. Walker & Barkman Mfg. Co., Hartford, Conn.
161. Waukesha Motor Co., Waukesha, Wis.
162. Wolf Auto Parts & Tire Co., 619 N. Ill. St., Indianapolis, Ind.
163. Wyckoff Auto Salvage Co., Sioux City, Iowa.
167. York Motor Car Co., York, Pa.
170. Zimmerman Mfg. Co., Auburn, Ind.



### Bearing Service Co. to be Dissolved

The Bearings Service Co. as an active organization will be dissolved December 31, 1922, according to Alfred K. Hebner, president and general manager.

The Bearings Service Co. was incorporated June 26, 1916, and will have completed by December 31, 1922, six and one-half years of existence, being the concern acting through 32 direct branches and approximately 1,000 distributors as the service department of The Timken Roller Bearing Co., the Hyatt Roller Bearing Co. and The New Departure Manufacturing Co. for the service distribution of Timken, Hyatt and New Departure bearings.

Mr. Hebner issued the following statement:

"Although the same mutually friendly attitude exists among the manufacturing principals through whose efforts the Bearings Service Co. was brought into existence, with automotive service activities and policies becoming more and more important in the industry as they have during the past several years there has been a growing mutual realization between The Timken Roller Bearing company and the General Motors Corp., whose interests have been represented in the Bearings Service Co., that the best ultimate goal would be secured by each through a separation of their bearings service program.

"To this end on and after October 1, 1922, the servicing of Hyatt and New Departure bearings, the manufacturers of which are units of the General Motors Corporation, will be handled by the United Motors Service, Inc., and a new company to be known as as The Timken Roller Bearing Sales & Service Co. will care for the servicing of Timken bearings.

"Until January 1, 1923, when The Timken Roller Bearing Sales & Service Co. will be in operation, the Bearing Service Co. will continue the servicing of Timken bearings as heretofore at all its 32 direct branches located in the following cities: Atlanta, Boston, Chicago, Detroit, Los Angeles, Minneapolis, New York, San Francisco, Seattle, Kansas City, Dallas, Cleveland, Denver, Indianapolis, Birmingham, Richmond, Philadelphia, St. Louis, New Orleans, Pittsburgh, Omaha, Portland, Toronto, Winnipeg, Brooklyn, Fresno, Milwaukee, Salt Lake City, Baltimore, Buffalo, Newark, Oklahoma City.

"In addition in any of these cities where the United Motors Service, Inc., does not have branches the Bearings Service Company's branches up to January 1, 1923, will sell for service Hyatt and New Departure bearings.

"To indicate the continued mutually friendly attitude in service affairs between the manufacturers of Timken, Hyatt and New Departure bearings, the United Motors Service, Inc., will appoint as service distributors of Hyatt and New Departure bearings the direct branches of The Timken Roller Bearing Sales & Service Co. in cities where the United Motors Service, Inc., has no direct branches and conversely The Timken Roller Bearing Sales & Service Co. will appoint direct branches of the United Motors Service, Inc., as its service distributors for Timken bearings in such cases.

"These arrangements will result in the public obtaining just as good if not better service on all these bearing lines, Hyatt, Timken and New Departure, than has been available in the past through the Bearings Service Company."

K. K. Hoag has been appointed advertising manager of the Hyatt Roller Bearing Co.

### Arrow Motors Changes Name to Courier

The Arrow Motors Co., Sandusky, Ohio, has changed its corporate name to the Courier Motors Co. to conform with the name of its car, which will be known as the Courier. As has been previously announced, the Arrow Motors Co. acquired the plants, assets and good will of the former Maibohm Motors Co. The Courier Motors Co. takes all these over from the Arrow Motors Co.

Production is under way on six cylinder models, which are custom-built and painted, and it is stated that enough orders are on hand to keep the plants at capacity for several months.

The officers of the company are A. C. Burch, president, who was former vice-president and director of sales of the Clydesdale Motor Truck Co.; O. O. Brace, vice-president, who is also president of the Sandusky Nut Co.; E. E. Ernst, treasurer; J. G. Pyle, secretary and general counsel; E. G. Kirby, vice-president of the Commerce-Guardian Trust & Savings Bank, Toledo; R. E. Hayslett, treasurer of the Hydraulic Steel Co., Cleveland; and N. T. Brotherton, of The Brotherton Co., Detroit.

### All-Steel Business Sedan Being Produced by Dodge

A new all-steel business sedan is announced by Dodge Brothers, Detroit. It will sell for \$1,195, or \$250 under the price of the previous sedan model which it replaces. The feature of the new body model is the use of steel for the entire body construction with the exception of the roof, which is of fabric construction not subject to rumble.

The finish is baked enamel instead of that obtained by the 18 hand rubber and painting operations formerly used, and this making it possible to mature the jobs in five days instead of ten. The upholstery is leather.

The rear seat cushion, rear side and back cushions are separate units, converting the entire rear section of the car into a spacious carrying compartment.

The front seat tilts forward, affording clearance through the rear doors. This gives a door opening large enough to admit a trunk or parcel 22 in. wide by 48 in. high.

### American Commercial Car Co. Asks Permission to Dissolve

The American Commercial Car Co., Detroit, has filed application with the Wayne Circuit Court, for permission to dissolve and wind up its affairs under the provisions of the statutes of Michigan, and asked that the Security Trust Co. be appointed temporary receiver for this purpose. This application does not mean that the corporation is insolvent and unable to pay its bills, but was filed because of present day depressed business conditions and other reasons, which made further operation of the business unprofitable.

### Olds Opens New Showroom in Detroit

As an addition to the Oldsmobile sales facilities in Detroit, the Olds Motor Works, of Lansing, Mich., has opened a new show room in the General Motors Building, at the corner of Grand and Second Boulevards. The new show room is to be under the direction of Ross C. Lowrie, who for years has been with the Oldsmobile branch in Detroit. In addition to the new General Motors Building show room, the company will continue to operate its branch show room at Woodward Ave. and Sproat St., under the direction of William J. Clemens, branch manager.



# BEARING DATA SECTION

In this section we have published the type number of both Ball and Roller Bearings used in about 3,000 models of Passenger Cars and Trucks from 1909 to 1919. Where Ball Bearings are used by the number of the bearing is given. Where Roller Bearings are used both the name of the bearing and the number are given.

## EQUIVALENT TABLE OF ANNULAR BEARINGS

Annular Ball Bearings are interchangeable. Below is a table showing the type number of each manufacturer equivalent to numbers we have used, which appear in the first column.

Key Bearing Numbers	Hess-Bright		S. R. B.	Gurney	U. S. (Strom)	Fafair	R. I. V.	F. & S.	S. R. O.	Norma Ball	Schafer	Schats Universal	S. K. F.	Rhine- land	B. F.	New Departure	
	Regular	Monarch	Ball													Radax	S. L.
200	200	6200	200	200	200	200a	0000A	A 10			202	200	1200	200a	200a	0200	12J
201	201	6201	201	201	201	201a	000A	A 12			202B	201	1201	201a	201a	0201	120
202	202	6202	202	202	202	202a	00A	A 13			203	202	1202	202a	202a	0202	1202
203	203	6203	203	203	203	203a	0A	A 17			203B	203	1203	203a	203a	0203	1203
204	204	6204	204	204	204	204a	1A	A 20	354b	L 20	204	204	1204	204a	204a	0204	1204
205	205	6205	205	205	205	205a	2A	A 25	355	L 25	205	205	1205	205a	205a	0205	1205
206	206	6206	206	206	206	206a	3A	A 30	356	L 30	206	206	1206	206a	206a	0206	1206
207	207	6207	207	207	207	207a	4A	A 35	357	L 35	207	207	1207	207a	207a	0207	1207
208	208	6208	208	208	208	208a	5A	A 40	358	L 40	208	208	1208	208a	208a	0208	1208
209	209	6209	209	209	209	209a	6A	A 45	359	L 45	209	209	1209	209a	209a	0209	1209
210	210	6210	210	210	210	210a	7A	A 50	360	L 50	210	210	1210	210a	210a	0210	1210
211	211	6211	211	211	211	211a	8A	A 55	361	L 55	211	211	1211	211a	211a	0211	1211
212	212	6212	212	212	212	212a	9A	A 60	362	L 60	212	212	1212	212a	212a	0212	1212
213	213	6213	213	213	213	213a	10A	A 65	363	L 65	213	213	1213	213a	213a	0213	1213
214	214	6214	214	214	214	214a	11A	A 70	364	L 70	214	214	1214	214a	214a	0214	1214
215	215	6215	215	215	215	215a	12A	A 75	365	L 75	215	215	1215	215a	215a	0215	1215
216	216	6216	216	216	216	216a	13A	A 80	366	L 80	216	216	1216	216a	216a	0216	1216
217	217	6217	217	217	217	217a	14A	A 85	367	L 85	217	217	1217	217a	217a	0217	1217
218	218	6218	218	218	218	218a	15A	A 90	368	L 90	218	218	1218	218a	218a	0218	1218
219	219	6219	219	219	219	219a	16A	A 95	369	L 95	219	219	1219	219a	219a	0219	1219
220	220	6220	220	220	220	220a	17A	A100	370	L100	220	220	1220	220a	220a	0220	1220
221	221	6221	221	221	221	221a	18A	A105	371	L105	221	221	1221	221a	221a	0221	1221
222	222	6222	222	222	222	222a	19A	A110	372	L110	222	222	1222	222a	222a	0222	1222
300	300	6300	300	300	300	300a	1B	E 10		M 10	302	300	1300	300a	300a	0300	1300
301	301	6301	301	301	301	301a	2B	E 12	301b	M 12	302b	301	1301	301a	301a	0301	1301
302	302	6302	302	302	302	302a	3B	E 15	302b	M 15	303	302	1302	302a	302a	0302	1302
303	303	6303	303	303	303	303a	4B	E 17	302c	M 17	303b	303	1303	303a	303a	0303	1303
304	304	6304	304	304	304	304a	5B	E 20	303	M 20	304	304	1304	304a	304a	0304	1304
305	305	6305	305	305	305	305a	6B	E 25	304	M 25	305	305	1305	305a	305a	0305	1305
306	306	6306	306	306	306	306a	7B	E 30	305	M 30	306	306	1306	306a	306a	0306	1306
307	307	6307	307	307	307	307a	8B	E 35	306	M 35	307	307	1307	307a	307a	0307	1307
308	308	6308	308	308	308	308a	9B	E 40	307	M 40	308	308	1308	308a	308a	0308	1308
309	309	6309	309	309	309	309a	10B	E 45	308	M 45	309	309	1309	309a	309a	0309	1309
310	310	6310	310	310	310	310a	11B	E 50	309	M 50	310	310	1310	310a	310a	0310	1310
311	311	6311	311	311	311	311a	12B	E 55	310	M 55	311	311	1311	311a	311a	0311	1311
312	312	6312	312	312	312	312a	13B	E 60	311	M 60	312	312	1312	312a	312a	0312	1312
313	313	6313	313	313	313	313a	14B	E 65	312	M 65	313	313	1313	313a	313a	0313	1313
314	314	6314	314	314	314	314a	15B	E 70	313	M 70	314	314	1314	314a	314a	0314	1314
315	315	6315	315	315	315	315a	16B	E 75	314	M 75	315	315	1315	315a	315a	0315	1315
316	316	6316	316	316	316	316a	17B	E 80	315	M 80	316	316	1316	316a	316a	0316	1316
317	317	6317	317	317	317	317a	18B	E 85	316	M 85	317	317	1317	317a	317a	0317	1317
318	318	6318	318	318	318	318a	19B	E 90	317	M 90	318	318	1318	318a	318a	0318	1318
319	319	6319	319	319	319	319a	20B	E 95	318	M 95	319	319	1319	319a	319a	0319	1319
320	320	6320	320	320	320	320a	21B	E100	319	M100	320	320	1320	320a	320a	0320	1320
321	321	6321	321	321	321	321a	22B	E105	320		321	321	1321	321a	321a	0321	1321
322	322	6322	322	322	322	322a	23B	E110	321		322	322	1322	322a	322a	0322	1322
403	403	6403	403	403	403	403a	1C	C 17	331	S 17	403b	403	403	403a	403a	0403	1403
404	404	6404	404	404	404	404a	2C	C 20	332	S 20	404	404	404	404a	404a	0404	1404
405	405	6405	405	405	405	405a	3C	C 25	333	S 25	405	405	405	405a	405a	0405	1405
406	406	6406	406	406	406	406a	4C	C 30	334	S 30	406	406	406	406a	406a	0406	1406
407	407	6407	407	407	407	407a	5C	C 35	335	S 35	407	407	407	407a	407a	0407	1407
408	408	6408	408	408	408	408a	6C	C 40	336	S 40	408	408	408	408a	408a	0408	1408
409	409	6409	409	409	409	409a	7C	C 45	337	S 45	409	409	409	409a	409a	0409	1409
410	410	6410	410	410	410	410a	8C	C 50	338	S 50	410	410	410	410a	410a	0410	1410
411	411	6411	411	411	411	411a	9C	C 55	339	S 55	411	411	411	411a	411a	0411	1411
412	412	6412	412	412	412	412a	10C	C 60	340	S 60	412	412	412	412a	412a	0412	1412
413	413	6413	413	413	413	413a	11C	C 65	341	S 65	413	413	413	413a	413a	0413	1413
414	414	6414	414	414	414	414a	12C	C 70	342	S 70	414	414	414	414a	414a	0414	1414
415	415	6415	415	415	415	415a		C 75			415	415	415	415a	415a	0415	1415
416	416	6416	416	416	416	416a	13C	C 80	343	S 80	416	416	416	416a	416a	0416	1416
417	417	6417	417	417	417	417a		C 85			417	417	417	417a	417a	0417	1417
418	418	6418	418	418	418	418a	14C	C 90	344	S 90	418	418	418	418a	418a	0418	1418
419	419	6419	419	419	419	419a		C 95			419	419	419	419a	419a	0419	1419
420	420	6420	420	420	420	420a	15C	C100		S100	420	420	420	420a	420a	0420	1420



# Roller and Ball Bearing Data for Cars and Trucks from 1908 to 1921

## KEY

### FRONT AXLE BEARINGS

- A—Inner Wheel.  
B—Outer Wheel.  
C—Steering Knuckle Thrust.

### REAR WHEEL BEARINGS

- D—Inner.  
E—Outer.  
F—Single Bearing.

### DIFFERENTIAL BEARING

- G—Right Hand.  
H—Left Hand.

### I—Thrust.

### DRIVE BEARINGS

- J—Pinion or Worm Shaft Front.  
K—Pinion or Worm Shaft Rear.  
L—Worm Spindle Thrust Front.  
M—Worm Spindle Thrust Rear.  
N—Universal Joint Propeller Shaft.

### CLUTCH BEARINGS

- O—Clutch Shaft Pilot.  
P—Clutch Shaft Rear.  
Q—Clutch Yoke or Throwout.

### R—Clutch Spider.

### S—Transmiss. Eng. Clutch Shaft.

### MOTOR BEARINGS

- T—Camshaft Front.  
U—Camshaft Rear.  
V—Camshaft Center.  
W—Crankshaft Front.  
X—Crankshaft Center.  
Y—Crankshaft Rear.

### TRANSMISSION BEARINGS

- AA—Main Shaft Front.

### BB—Main Shaft Rear.

### CC—Spline Shaft Pilot.

### DD—Counter Shaft Front.

### EE—Counter Shaft Rear.

### FF—Reverse Idler Gear.

### FAN BEARINGS

### GG—Hub Bearing.

### HH—Water Pump Shaft Bearing.

### JJ—Air Pump Shaft Bearing.

### STEERING POST

### KK—Thrust Upper.

### LL—Thrust Lower.

Magnetos and Lighting Generators are not covered in the following tables. Repairs on these machines are highly specialized work, and best results are obtained by returning to the manufacturer or to an electrical Repair Service Station especially equipped for this service.

**HOW TO USE THIS TABLE.**—Look in the key at the top of this page for the letter corresponding to the particular bearing desired. Turn to the table and find the make and model of car for which the bearing is desired. Follow until the key letter is found.

**In the Case of Roller Bearings,** the make of bearing, followed by the manufacturer's type number, will be found following the key letter, as (Hy 16727) meaning, Hyatt bearing number 16727. Timken bearings can be supplied in parts, being composed of cone and cup. The numbers given show the cone first, as (5351-5320), 5351 being the cone, and 5320 the cup. Where Timken Bearings immediately follow name of car and model, and before any letter is used, it means that all bearings mentioned in that model are Timken Roller.

**In the Case of Ball Bearings,** the different makes of which are interchangeable, a number alone will be found following the key letter. This is a key number. Turn back to the equivalent table of annular ball bearings, at the beginning of the bearing section, and find this key number, which will be in the first column. Follow across the page until the column containing the make of bearing desired is reached. The number in this column will be the manufacturer's type number. In some instances, a notation such as the following will be found: 307 x 1½"; this means, 307 bearing with a special width, namely, 1½" wide instead of the usual width employed. Where the letters B, C, N, D or T appear after the bearing, that letter must be used in ordering, as it is part of the manufacturer's designation number.

## ABBREVIATIONS

- Ann—Annular Ball Bearing.  
D. R.—Double Row.  
S. R.—Single Row.  
R. T.—Radial-Thrust Bearings.  
Norma—Norma Co. of Amer.

- Bantam—Bantam Ball Brg. Co.  
Bock—Standard Parts.  
B. & B.—Borg & Beck.  
Bower—Bower.  
D. W. F.—Hess-Bright.  
F. S.—J. S. Bretz.

- Gur.—Gurney. Faf.—Fafnir.  
H. B.—Hess-Bright.  
Hy.—Hyatt.  
N. D.—New Departure.  
Rh.—Rhineland.

- Brg. Co. of Amer.—Bearing Co. of America.  
S. K. F.—S. K. F. Industries.  
S. R. B.—Standard Roller Bearing.  
Tim.—Timken Bearing.  
U. S.—"U. S. Strom."

**ABBOTT—1916 (6-44)**—(A) Bower, 307N; (B) Bower, 305AL; (D & E) Bower 209AL; (G) Bower, 209A; (AA) 210; Hy, 27797; (BB) 206; Hy, 27899; (DD) 306; Hy, 26972; (EE) 308; Hy, 26972; (FF) Hy, 26956.  
**1917 (6-44)**—(A, B, D & E)—Hy, 16779; (G & H) Hy, 26056; (J) 0208; (K) 0407.  
**1918 (6-44)**—(A) Bower, 308AL; (B) Bower, 305AL.  
**1917 (6-60)**—(A) Br, 308AXL; (B) 305AXL; (F) 16681; (G & H) Hy, 26056; (J) 307; (K) 407.

**ACASON—1916 (2 Ton)**—All Timken Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 5590-552; (J & K) 5390-532; (AA) 335-3320; (BB) 357-353; (DD & EE) 339-333.  
**1917-18-19 (1½ Ton)**—(AA) Hy, 97026; (DD & EE) Hy, 16506; (FF) Hy, 16820.  
**1918—Tim. Brgs. from A-K on all models—(2 Ton)**—(A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 5590-552; (J & K) 5390-532.  
**1918 (3½ Ton)**—(A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5758-5720; (J & K) 5590-552.  
**1918 (5 Ton)**—(A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J & K) 6359-6320.  
**1919 (3½ Ton)**—(Q) 205; (AA) 212DR; (BB) 308DR; (DD & EE) 306.  
**1920 (R-1 Ton)**—(D) 539TE-532; (G & H) 397-3920; (J) 444-432; (K) 456-453; (Q) 205; (BB) 307; (DD) 306; (EE) 306.  
**1920 (R-1½ Ton)**—(D) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (Q) 205; (AA) Hy, 17028; (BB) 308; (CC & FF) Hy, 16820; (DD & EE) H16506.  
**1920 (H-2½ Ton)**—(A) 4558-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559T-552; (J) 539E-532; (K) 5578E-5521; (Q) 205; (AA) 209; (BB) 309; (CC & FF) Hy, 26839; (DD) 306; (EE) 307; (HH) Hy, 27095.  
**1920 (L-3½ Ton)**—(A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5758-5720; (J) 6375E-6323; (K) 559-552; (Q) 205; (AA) 209; (BB) 306; (CC & FF) Hy, 17966; (DD) 307; (HH) Hy, 27095.  
**1920 (M-5 Ton)**—(A) 5550-5520; (B) 5351-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J) 6375E-6323; (K) 6455E-6420; (Q) 205; (AA) 210; (BB) 310; (CC & FF) Hy, 17966; (DD) 307; (EE) 308; (HH) Hy, 27095.

**ACME—1916-17 (2 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 5590-552; (J & K) 5390-532; (AA & BB) 339-333; (DD & EE) 319-313.  
**1917 (1 Ton)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 5590-552; (H) 4560-454; (J & K) 5390-532.  
**1919-1920**—Tim. Brgs. from A-K on all models—Model (A)—(A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 5590-552; (J & K) 5390-532; (N) 307; (O) 205; (P) 212DR; (Q) T19; (BB) 308DR; (DD & EE) 306; (GG) Oakes CX1608.  
**1919 (B)**—(A) 4558-4520; (B) 3360-3320; (D & E) 5550-5521; (G & H) 477-473; (J & K) 456-453; (O) 205; (P) 212DR; (Q) T19; (BB) 307DR; (DD & EE) 306; (GG) Oakes CX1608.  
**1919-1920 (C)**—(A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5758-5720; (J) 5390-552; (K) 6359-6320; (Q) 205; (P) 212DR; (Q) B & B; (BB) 309DR; (DD & EE) 307; (GG) Oakes CX1608.  
**1919-1920 (F)**—(A) 4555-4520; (B) 3360-3320; (D & E) 6378-6320; (G & H) 477-473; (J & K) 456-453; (N) 307; (O) 205; (P) 212DR; (Q) T19; (BB) 307DR; (DD & EE) 306; (GG) Oakes CX-1608.  
**1919-1920 (E)**—(A) 5550-5520; (B) 5351-5320; (C) 5354B-L-563; (D, G & H) 780-772; (E) 6552-6551; (J & K) 6359-6320; (O) 205; (P) 208DR; (Q) B & B D-41; (BB) 310DR; (DD & EE) 308; (GG) Oakes C-2802.  
**1920 (B)**—(A) 4364-4320; (B) 3161-3120; (D & E) 539T-532; (G & H) 397-3920; (J) 444-432; (K) 456-453; (O) 205; (P) 212DR; (Q) T19; (BB) 307DR; (DD & EE) 306; (GG) Oakes CX-1608.

**ADVANCE-RUMELY—1920 (A 1½ Ton)**—(A) Tim, 3762-3720; (B) 3360-3320

**AHRENS-FOX & CONTINENTAL—1915 (Spec.)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6556-6321; (E) 5555-5320; (G & H) 3955-3920; (J) 3459-3420; (K) 559-552.  
**1917 (K & MK)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 5550-5520; (E-G & H) 5553-5520; (J & K) 539-532; (AA) 456-4520; (BB) 539-532; (DD & EE) 415-412.

**1917 (L)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320; (G & H) 5553-5520; (J & K) 539-532; (AA) 456-4520; (BB) 5552-5520; (DD & EE) 3554-3520.  
**1919-1920 (KMN)**—(A) Tim, 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 5550-5520; (E) 5354-5320.  
**1920 (L-P)**—(A) Tim, 555D-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320.

**AIR-O-FLEX—1919 (183-2 Ton)**—(G) Hy, 26084; (H) Hy, 26085.

**ALCO (Pass.)—1910 (12-40, 9-60)**—(A) 310; (B) 406; (D) 312; (E) 212; (G & H) 312; (J) 411; (K) 406; (AA) 211; (BB) 409; (DD) 308; (EE) 310.  
**1912 (9-16)**—(A) 308; (B) 306; (D) 312; (E) 210; (G & H) 310; (K) 311; (AA) 210; (BB) 307; (DD & EE) 307.

**ALCO (Truck)—1909-10-11 (3 Ton)**, **1912-13 (1 & 2 Ton)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 5550-5520; (E) 5351-5320.

**1912-13 (3 Ton)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 6356-6321; (E) 5551-5520.  
**1912-13 (4 & 5 Ton)**—Tim. Brgs.; (A) 6356-6321; (B) 5551-5520; (D) 6550-6521; (E) 6351-6321.

**1913 (6½ Ton)**—Tim. Brgs.; (A) 6356-6321; (B) 5551-5520; (D) 6550-6521; (E) 6352-6321.

**All American—1919-1920 (A)**—(A) Tim, 3357-3320; (B) 2382-2320; (D) 420-413; (E) 319-313; (G) 276-2720; (J) 275-2720; (K) 335-3320; Center Prop. Shaft Brg. 207DR; (O) 205DR; (P) 208 DR; (Q) Spec.; (AA) 208DR; (BB) 305DR.

**1919-1920 (B-1)**—(A) Tim, 3357-3320; (B) 2382-2320; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412; Center Prop. Shaft Brg. 207; (O) 205DR; (P) 308; (Q) Spec.; (AA) 308; (BB) 308; (DD) 305; (EE) 306.

**1919-1920 (C-1½)**—(A) Tim, 435T-4320; (B) 3196-3120; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412; Center Prop. Shaft Brg. 207; (O) 205DR; (P) 308; (Q) Spec.; (AA) 308; (BB) 308; (DD) 305; (EE) 306.

**ALLEN—1915 (37) & 1916 (32)**—(F) 309; (G & H) 209; (K) 307; (O) 205; (AA) 20; (BB) 207.  
**1916-17 (Classic)**—(F) Bower, 309ADT; (G & H) Bower, 209AL; (J) Bower, 253T; (K) Bower, 307A.

**1917 (37)**—(F) 310; (G & H) 0210; (J) 307; (K) 407.  
**1917 (G & H)** 0209; (J) 0306; (K) 406; (Q) 205; (AA) 208; (BB) 207.

**1917 (32)**—(F) 309; (G & H) 209; (K) 307; (AA) 208; (BB) 207.  
**1916-17-18 (Model 41)**—(A) Bower, 307AL; (B) Bower, 305AL; (D & E) 309; (G & H) 209; (J) 207; (K) 307; (O) 205; (AA) 208; (BB) 207; (DD & EE) 304.

**1919 (41)**—(DD & EE) Hy, 16957.  
**1919-20-21 (43)**—(A) Bk, 317-31; (B) Bk, 235-23; (G & H) 355-35; (J) 257-25; (K) Bk, 334-33; (Clutch) B & B; (S) 208; (CC & DD) Hy, 16957.

**ALLISON—1920 (603)**—(A) Tim, 317-312; (B) 2687-2620; (C & D) 415T-412A; (E & G) 359S-3520; (H) 2785-2720; (J) 3381-3320.

**ALTER—1915**—(F) Hy, 16018 or 16225; (G & H) Hy, 26062 or 26063; (O) 205; (AA) 208; (BB) 307.

**1916-17**—(F) Hy, 16225 or 16018; (G & H) Hy, 26063; (J) 0306; (K) 307; (O) 205; (AA) 208; (BB) 307.

**1918 (All Models)**—(F) Hy, 16018; (G & H) 26063.

**AMERICAN—1920-21 (A)**—(A) Bk, 310; (B) Bk, 308; (D, G & H) 5213; (J) 309; (K) 5409; (O) 205; (P) 208; (AA) 307; (BB) 308; (CC) 304; (DD & EE) 306.

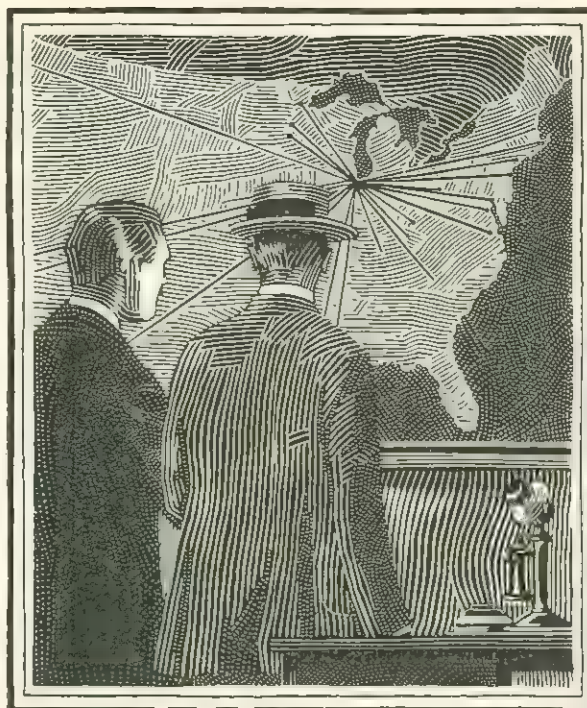
**1920-21 (B)**—(A) Tim, 419-412; (B) 3191-3120; (D) Br, 309; (E) Br, 306; (G, H & J) Tim, 335-3320; (K) Tim, 417-412; (O) 205; (AA) 208; (BB) 307; (CC) 304; (DD) 305; (EE) 306.

**1920-21 (B-1)**—(A) Tim, 3720-3762; (B) 3320-3360; (D) 311; (G & H) 213; (J) 407; (K) 5407; (O) 205; (AA) 208; (BB) 307; (CC) 304; (DD) 305; (EE) 306.

**AMERICAN & BRITISH—1920**—(A) 407; (B) 305; (D) 309; (E) 209; (G & H) 309; (I) Spec.; (J) Hy, 84070; (K) 306; (O) 305; (Q) Spec.; (T) 206DR; (U) 207; (V) 210; (AA) 308; (BB) 307; (CC) 305; (DD & EE) 307; (GG) 202; (KK & LL) Spec.

**AMERICAN LA FRANCE—1914 (Spec.)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320 (C) 5354-5320; (D) 6356-6321; (E) 5355-5320.





# SERVICE

Ahlberg Ground Bearings may be obtained immediately in thirty-seven cities.

Through the medium of direct factory owned branches we are able to maintain a high standard of service. If you use Ahlberg Ground Bearings, you need carry no stock. We will do that for you.

Each of our thirty-seven branches carries a complete stock of all sizes of Ahlberg Ground Bearings as well as high grade new bearings for your convenience.

ATLANTA BOSTON BUFFALO AKRON THE SIGN BALTIMORE SEATTLE BROOKLYN  
CINCINNATI CLEVELAND ST. PAUL COLUMBUS DALLAS DETROIT DENVER  
INDIANAPOLIS LOS ANGELES FRESNO DULUTH KANSAS CITY MEMPHIS  
MILWAUKEE MINNEAPOLIS OMAHA NEWARK NEW ORLEANS ST. LOUIS  
NEW YORK PORTLAND OAKLAND PITTSBURGH WASHINGTON TOLEDO  
PROVIDENCE SAN FRANCISCO SERVICE YOUNGSTOWN PHILADELPHIA

**AHLBERG BEARING COMPANY**  
321 EAST TWENTY NINTH STREET, CHICAGO ILLINOIS



## AMERICAN LA FRANCE—Continued

1910-14-15-16 (10-11-12-14)—Tim. Brgs.; (A) 539-532; (B) 415-413; (D) 539-532; (E) 415-413.  
 1911-12 (10)—Tim. Brgs.; (A) 5355-5320; (B) 415-413; (D) 5355-5320; (E) 415-413.  
 1910 (Special)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321.  
 1917 (15 & 19)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 6356-6321; (E) 5355-5320; (G & H) 5755-5720.  
 1917 (31)—Tim. Brgs.; (A) 6552-6521; (B) 5355-5320; (C) 5354-5320.  
 1917-18 (75-10-12-14-20-34-35-40-41)—Same as 1910 Model 10-11-12-14.  
 1920—(2-C)—(D) Tim, 6356-6321; (E) 5355-5320.  
 1920 (10-12-45)—(A) Tim, 539-532; (B) 415-413; (D) 539-532; (E) 415-413.  
 1920 (19)—(A) Tim, 5550-5520; (B) 5351-5320; (D) 6356-6321; (E) 5355-5320; (Sprocket Shaft) 5755-5720.

AMERICAN MOTORS—1917 (Model A)—(F) Hy, 16779; (G & H) Hy, 26056; (J) 0307; (K) 0407; (Q) 205; (AA) 209; (BB) 307.  
 1918-19—(F) Hy, 16779; (G & H) Hy, 26056.  
 1919—(A) Br. 308AXL; (B) Br. 305AXL; (F) Hy, 16779; (G & H) Hy, 26056; (I) Salis, 6177; (J) 407; (K) 307DR; (O) 205; (Q & R) B & B; (AA) 210; (BB) 307; (EE) 305; (FF) 306; (KK & LL) Spec.  
 1920—(B)—(A) Br. 336TXL; (B) Br. 236TX; (F) 310DR; (G & H) Tim, 366-363; (J) Hy, 57883; (K) 307DR; (O) 210; (Q & R) B & B; (KK & LL) Spec.  
 1920-21—(C-6)—(A) Tim, 336-3320; (B) 236-2320; (F) 310 DR; (G & H) Tim, 366-363; (J) Hy, 57883; (K) 307DR.

ANDERSON—1914-15 (Mod. 47-48-49-50-51-52-53-54)—(A) Tim, 342-3320; (B) Tim, 235-2320; (D & E) Tim, 365-363; (G & H) 209; (J) 307; (M) 307; (U) S.K.F. 709U.  
 1916-17—(G & H) 213; (J) 307; (K) 309.  
 1917-18 (6-40)—(A) Bower, 307N; (B) Bower, 305A; (D & E) Bower, 209AL & (G) Bower, 209A.  
 1913 (1 Ton Tr.)—(A) Tim, 419-412; (B) 3150-3120; (D) Tim, 4554-4520; (E) Tim, 3159-3120.  
 1919—(20)—(A) Bk, 337-33; (B) Bk, 235-23; (F) Hy, 16692; (G & H) Hy, 26486; (J) Bk, 317-31; (K) Bk, 333; (Q) B & B-D-41; (Retract Col.) B & B-D-39; (S) 205; (AA) 209; (BB) 307; (KK) 220.  
 1920-21—(30, 40)—ABR. 336TXL; (B) 236TX; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR (K) Hy, 27883; (Q) (B) D-41 (Retract. Col) B & B-D-39; (S) 205; (AA) 209; (BB) 307; (G & H) Onkes-C-1161; (KK & LL) Gemmer 4797.

ANDERSON ELECTRIC—1916 (All Mod.)—(A) Tim, 342-3320; (B) Tim, 235-2320; (D & E) Tim, 366-363; (G & H) 213; (J) 307; (K) 309.  
 1917 (Mod. 62-63-64-65-66A)—(A) Tim, 342-3320; (B) Tim, 235-2320; (D & E) Tim, 365-363; (G & H) 213; (J) 307; (K) 309.  
 1917 (Mod. 68-69B)—Tim. Brgs.; (A) 342-3320; (B) 235-2320; (D) 435T-4320.  
 1913 (Mod. 38)—(A) Tim, 336-3320; (B) Tim, 235-2320.  
 1915 (2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320; (G) 375-3720; (H) 256-2520; (J) 415-412; (K) 435-4320.  
 1917 (3 & 4 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D) 5550-5520; (E) 5355-5320; (G & H) 375-3720; (J) 256-2520; (K) 415-412.  
 1918—(F) Hy, 16692; (G & H) 26486.

ANGER—1915-16-17 (6-60)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532.

APEX—1919-20-21—(C)—(A) Tim, 3320-3357; (B) 2320-2382T; (D) Tim, 420-413; (E) 319-313; (G) 276-2720; (H) Wright 338; (J) 275-2720; (K) 335-3320; (N) SKF 307; (O) 205; (P, S & BB) 307; (Q) 212; (AA) 304; (DD) 305; (EE) 306; (FF) Spec.; (GG) Hy, C-600.  
 1919-20-21—(D, E)—(N) SKF, 307; (O) 205; (P, S & BB) 307; (Q) 212; (AA) 304; (DD) 305; (EE) 306; (FF) Spec.; (GG) Hy, C-600.

APEX MOTOR—1920—(A-L)—(A) Tim, 336-3320; (B) Tim, 236-2320; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883.

APPERSON—1913-14 (4-45) (455)—(A) 0309; (D & E) Tim, 436-4320; (F) 408; (G & H) Tim, 885-383; Ann, 211; (J) Tim, 357-353; Ann, 307; (K) Tim, 357-353; Ann, 407; (AA) Tim, 365-363; Ann, 210; (BB) Tim, 417-412; Ann, 307; (DD & EE) Tim, 319-313; Ann, 306.  
 1915—(G & H) Hy, 26056; (Q) 1210; (AA) Hy, 17074; (BB) Hy, 16562; (DD & EE) Hy, 16508.  
 1917 (All Models)—(A) Tim, 343-3320; (B) Tim, 235-233; (F) Tim, 415T-412; (G & H) Hy, 26470; (J) Tim, 256-2530; (K) Tim, 417-412; (O) 205.  
 1915-16 (4-40 & 6-8)—Tim. Brgs.; (D) 415T-412; (G & H) Hy, 26056; (J) 256-2530; (K) 417-412; (AA) Hy, 17074; (BB) Hy, 16562; (DD & EE) Hy, 16508.  
 1918-19 (Mod. 8-19A)—(A) Tim, 343-3320; (B) Tim, 235-233; (F) 415T-412; (G & H) Hy, 26056; (J) Tim, 256-2530; (K) 441-4320; (P) 205; (AA) Hy, 17047; (BB) Hy, 16562; (DD & EE) Hy, 16508; (GG) ND 05.  
 1920—(8-20S, A)—(G & H) Hy, 26470; (J) Tim, 417-412; (K) Tim, 441-4320.  
 1921—(8-21S, A)—(A) Tim, 342-4320; (AA) 26487; (GG) 303.

ARMLEDER—1917-18 (2 & 3½ Ton)—(O) 205; (AA) 308; Hy, 17026; (DD & EE) Hy, 16506; (FF) Hy, 16820.

1919-20-21—(HW) Tim. Brgs. from A-K on all models—(A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (J) 539E-532; (K) 539E-532; (K) 539E-532; (O) 205DR.  
 1919-20-21—(KW)—(A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375-6323; (O) 205DR.  
 1920-21—(20)—(A) 4558-4520; (B) 3360-3320; (F) 6378-6320; (G & H) 447-473; (J) 456-453; (K) 539E-532; (O) 205DR.

ARGONNE—1920—(GG) Hy, 29005.

ATLANTIC—1916 (Mod. C)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539E-532.  
 1916 (Mod. M)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5553-5520; (E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532.  
 1917-18 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (C) 341B-3320; (D) 4558-4520; (E) 3360-3320.  
 1917-18 (2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320.  
 1917-18 (Mod. 3C & 3½ Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6356-6321; (E) 5355-5320.  
 1917-18 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6550-6521; (E) 6354-6321.

ATLAS—See Martin Atlas.

ATTERBURY TRUCK—1914-15 (2 Ton)—Tim. Brgs.; (D) 4350-4520; (E) 4361-4320.  
 (Mod. D, 3 Ton)—Tim. Brgs.; (D) 6550-5520; (B & E) 5351-5320.  
 (Mod. E, 5 Ton)—Tim. Brgs.; (D) 6550-5520; (E) 6354-6321.  
 1915 (Mod. D-W)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539E-532; (AA & BB) 440-4320; (DD & EE) 415-512.  
 1915 (Mod. B-W)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559E-552; (H) 456E-454; (J & K) 539E-532; (AA & BB) 440-4320; (DD & EE) 316-312.  
 1915 (Mod. A-W)—Tim. Brgs.; (D & E) 375-3720; (G & H) 559E-552; (J & K) 539E-532; (AA) 277-274; (BB) 339-333.  
 1915 (Mod. C-W)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D & E) 5553-5520; (H & G) 559E-552; (J & K) 539E-532; (AA, BB, DD & EE) 335-3320.  
 1916 (Mod. 6-B)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (C) 341-3320; (D) 4553-4520; (E) 3762-3720; (G) 559E-552; (H) 456E-454; (J & K) 539E-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.  
 1916 (Mod. 6-C)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (AA) 440-4320; (BB) 435-4320; (DD & EE) 415-412.  
 1916 (Mod. 6-D)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539E-532; (AA) 440-4320; (BB) 435-4320; (DD & EE) 415-412.  
 1917 (Mod. 6-R-10, 1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.

1917 (Mod. 7-C-11, 2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.

1917 (Mod. 7-D-12, 3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539E-532; (AA & BB) 357-853; (DD & EE) 339-333.

1917 (Mod. 6-B-9)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559E-552; (H) 456E-454; (J & K) 539E-532; (AA & BB) 344-333; (DD & EE) 319-313.

1919-7R, C)—Tim. Brgs. from A-K on all models—(A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (O) 205DR; (AA) 344-333; (BB) 339-333; (CC) 306; (DD & EE) 319-313; (GG, HH, KK & LL) Spec.

1919—(7D)—(A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559E-552; (K) 6359-6320; (O) 205DR; (AA & BB) 357-353; (CC) 306; (DD & EE) 339-333; (GG, HH, KK & LL) Spec.

1919—(8E)—(A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J & K) 6359-6320; (O) 205DR; (AA) 439T-432; (BB) 435-4320; (CC) 355; (DD & EE) 415-412; (GG, HH, KK & LL) Spec.

1920—(20R)—(A) 4364-4320; (B) 3161-3120; (F) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (N) SKF, 407; (O) 205DR; (P) 208; (T, U, V, W, X & Y) Spec.; (BB) 307; (CC) 304; (DD) 305; (EE) 306; (GG, HH, KK & LL) Spec.

1920—(7CX)—(A) 4558-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (O) 205DR; (AA) 344-333; (BB) 339-333; (CC) 306; (DD & EE) 319-313; (GG, HH, KK & LL) Spec.

1920—(7D)—(A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6375-6323; (O) 205DR; (AA & BB) 357-353; (CC) 306; (DD & EE) 339-333; (GG, HH, KK & LL) Spec.

1920—(8E)—(A) 5550-5520; (B) 5351-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 6375E-6323; (K) 6455-6422; (O) 205DR; (AA) 439T-432; (BB) 435-4320; (CC) 355; (DD & EE) 415-412; (GG, HH, KK & LL) Spec.

AUBURN 1915 (Mod. 1-36)—(F) Hy, 16691; (G & H) Hy, 26486; (K) 307; (Q) 205; (AA) 210; (BB) 307; (DD & EE) 305.

1915 (Mod. 6-40)—(F) 310; Hy, 16675; (G & H) 212; (G) Hy, 26059; (H) Hy, 26232; (J) 0309; (K) 307; (Q) 205; (AA) 210; (BB) 307; (DD & EE) 305.

1916 (Mod. 6-40)—(J) 308; (K) 405; (Q) 205; (AA) 210; (BB) 307; (DD & EE) 206.

1916-17 (Mod. 6-38)—(F) Hy, 16675-16691; (G) Hy, 26056-26486; (H) 26486; (K) 307; (Q) 205; (AA) 210; (BB) 307; (DD & EE) 206.

1917 (Mod. 4-40)—(F) 310; (G & H) 212; (J) 0309; (K) 407; (Q) 209; (AA) 209; (BB) 307; (DD & EE) 306.

1917 (Mod. 6-39)—(F) Hy, 16692; (G & H) Hy, 26486; (J) 307; (O) 205; (Q) 205; (AA) 309; (BB) 307; (CC) 210; (D) 305; (EE) 306.

1917 (Mod. 6-44)—(O) 205; (AA) 210; (BB) 307; (CC) 210; (DD) 305; (EE) 306.

1918 (Mod. 6-40)—(F) 310; (G & H) 212; (J) 0309; (K) 307; (Q) 205; (AA) 210; (BB) 307; (DD & EE) 305.

1919 (Mod. 6-39H)—(F) Hy, 16692; (G & H) Hy, 26486.

1919—(A) Bk, 337-33; (B) 235-23; (F) 310DR; (G & H) 355-35; (J) Bk, 317-31; (K) Bk, 340-33; (O) 205; (AA) Hy, 16950; (BB) 307; (DD) 305; (EE) 306.

1920-21 (6-39)—(A) Bk, 337-33; (B) Bk, 235-23; (F) 310DR; (G & H) Tim, 366-363; (J) Hy, 57883; (K) 307DR; (O) 205; (AA) Hy, 16950; (BB) 307; (DD) 305; (EE) 306.

AUSTIN—1916-17 (Mod. 12)—(F) 213.  
 1917 (Mod. 7T)—(F) 313; (G & H) 312; (K) 307.

1917—(F) 312; (O) 205; (AA & BB) 208; (DD) 306; (EE) 305.

AUTOCAR—1914-15-16-17-18—Tim. Brgs.; (A) 3750-3720; (B) 337-3320; (D & E) 477-473; (G & H) 395-3920; (J) 335-3320; (K) 439-4320; (W) Ann, 410; (Y) Ann, 410; (AA) 3366-3320; (BB, DD & EE) 3160-3120.

1919 (Mod. XXI-F)—Tim. Brgs.; (A) 3750-3720; (B) 337-3320; (D & E) 477-473; (G & H) 395-3920; (J) 335-3320; (K) 439-4320; (Jackshaft Right & Left) 455-4520; (P) (2) 3366-3320; (W) Ann, 410; (Y) Ann, 410; (AA) 1985; (BB, DD & EE) 3100-3120.

1919-20-21 (XXI-F, G)—(A) Tim, 3750-3720; (B) 337-3320; (D & E) 477-473; (G & H) Tim, 395-3920; (J) Tim, 335-3320; (K) 439-4320; (Jackshaft) Tim, 455-4520; (P) Tim, 3366-3320; (Q) Spec.; (W & Y) 410; (BB, DD & EE) Tim, 3160-3120; (CC) Tim, 1985; (Cone GG & HH) 206.

1920-21 (XXVI-B, Y)—(A) Tim, 560-552; (B) Tim, 3381-3320; (D & E) Tim, 749-742; (G & H) Tim, 560-552; (J) Tim, 419-414; (K) Tim, 537-532; (Jackshaft) Tim, 537-532; (P) 307; (Q) 212; (W) 413; (Y) 414; (Drive Shaft-Front) 307DR; (BB & EE) 308DR; (CC) 304DR; (DD) 307; (Drive Shaft Rear) 213; (GG) 304; (Fan Drive Shaft) SKF, 305.

AUTHOR—1919—(10-5 Ton)—(GG) Hy, 29007.

AVAILABLE—1915 (¾ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559E-552; (H) 456E-454; (J & K) 539E-532; (AA) 339-333; (BB) 277-274.

1915 (1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (AA & BB) 357-353; (DD & EE) 339-333.

1915 (1½ Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320.

1916 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559E-552; (H) 456E-454; (J & K) 539E-532; (AA) 277-274; (BB) 339-333.

1916 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559E-552; (J & K) 539E-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

1917 (3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539E-532; (AA) 337-3320; (BB, DD & EE) 335-3320.



Avery—Continued

1920-21 (1 Ton)—(A) Gilliam-335-3320; (B) Gilliam 235-2320; (C) C9; (D) Tim, 420-413; (E) Tim, 319-313; (Int. Gear Pinion) Br. 306; (G) Wright 276; (H) Tim, 336-3320; (J) 275-2720; (K) Tim, 335-3320; (O) 205; (Q) C25; (AA) Gur. 208; (BB) Gur. 306.

**BAILEY**—1923 (4-75)—(A) Bk, N308; (B) Bk, 316; (F) Bk, N209; (G & H) Bk, B210; (J) Bk, N307; (K) Bk, 537; (O) 205; (AA) 337; (BB) 335; (DD & EE) 316.

1920 (6-54E)—(A) Bk, N308; (B) Bk, 316; (F) Bk, N209; (G & H) Bk, B210; (J) Bk, N307; (K) Bk, 537; (AA) 308; (BB) 307; (DD) 305; (EE) 306.

**BAKER ELECTRIC**—1915 (Mod. E-A)—Tim. Brgs.; (A) 6356-6321; (B) 5355-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321.

1915 (Mod. O-E)—Tim. Brgs.; (A & D) 3750-3720; (B & E) 335-3320; (C) 341-3320.

1914-15-16-17-18 (Baker R. & L., Mod. J, B & C)—Tim. Brgs.; (A) 3358-3320; (B) 3154-3; 3154-3120; (D & E) 365-363.

(Mod. V & W)—(A) 306; (B) 304; (D & E) 309.

(Mod. Z) ZF)—(A) 3308; (B) 6306; (D) 309; (E) 209.

1919-20 (4-5, B-36)—(A) Tim, 3358-3320; (B) Tim, 3154-3120; (D & E) Tim, 365-363.

**BECK-HAWKEYE**—1919—(D & E) Hy, 16670; (G & H) Hy, 26069; (J & K) Hy, 26668; (GG) Hy, 29097.

1919 (C & D)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (D & E) Hy, 26662; (G & H) Hy, 26388; (J & K) Hy, 26777; (GG) Hy, 29097.

1919 (A & B)—(A) Tim, 3362-3320; (B) Tim, 2382-2320; (D & E) Hy, 16670; (G & H) Hy, 26069; (J & K) Hy, 26668; (GG) Hy, 29097.

1920 (A & B)—(A) Tim, 3362-3320; (B) Tim, 2382-2320; (D & E) Hy, 46670; (G & H) Hy, 26069; (J & K) Hy, 26668; (GG) Hy, 29095.

1920 (C & D)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (D & E) Hy, 26662; (G & H) Hy, 26388; (J & K) Hy, 26777; (GG) Hy, 29095.

1920 (D-3 Ton)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (D & E) Hy, 47893; (G & H) Hy, 26480; (J & K) Hy, 26669; (GG) Hy, 29095.

**BECK**—1916 (1 Ton)—(E) Bower, 307NDT.

1917-18 (1½ Ton)—(E) Bower, 308NDT; (D) Hy, 16670; (G & H) Hy, 26069.

1917-18 (2 Ton)—(E) Bower, 410NDT; (D) Hy, 26662; (G & H) Hy, 26356.

**BEECH CREEK**—1916-17 (4-Wheel Drive)—Tim. Brgs.; (A-B-D-E-G & H) 477-473; (C) 3187-3120; (J) 395-3920; (K) 459-453; (AA) 344-3320; (BB, DD & EE) 417-412.

1917 (3 Ton)—(D) Bower 311N; (E) Bower 311N.

1918 (4-WD)—Tim. Brgs.; (A, B, D, E, G & H) 477-473; (C) 3157-3120; (J) 395-3920; (K) 459-453; (AA) 344-3320; (BB) 447-4320; (DD & EE) 415-412.

**BEGGS**—1918-19 (V-2)—(A) Tim, 257-2520; (B) Tim, 235-2320; (E) 415T-412A; (G & H) 359T-3520; (J) 257-2520; (K) 3381-3320.

1918 (18)—(A) Tim, 316-312; (B) Tim, 235-2320; (E) 415T-412A; (G & H) 359T-3520; (J) 257-2520; (K) 3381-3320.

1920 (2550F, R)—(A) Bk, N307; (B) Bk, N305; (D & E) Bk, 276-27; (G & H) Bk, N210; (J) Bk, N308; (K) Bk, 3191-311D.

1920 (19)—(A) Tim, 317-312; (B) Tim, 2687-2620; (E) 415T-412A; (G & H) Tim, 359S-3520; (J) 2785-2720; (K) 3381-3320.

**BELL**—1916-17-18—(AA) Hy, 27797; (BB) Hy, 27899; (FF) Hy, 26956.

1919—(A) Br. 317TX; (B) Br. 235TX; (D & E) Br. 208AX; (G & H) Hy, 26216; (AA) Hy, 27797; (BB) Hy, 27899.

1919 (1½)—(C) Hy, 26084; (H) Hy, 26085.

1919 (2½)—(C & H) Hy, 26084.

1920 (1½ Ton)—(C & H) Hy, 26084; (GG) Hy, 29097.

**BENHAM**—1915 (Pleas.)—Tim. Brgs.; (A) 415-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 539-532; (K) 439-4320.

**BEN HUR**—1917 (17)—(A) 415-412A; (B) 2382-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

1918 (17)—(A) Tim, 3381-3320; (B) 2382-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

**BESSEMER**—1915 (Mod. D)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559c-552; (J & K) 539c-532; (AA, BB, DD & EE) 335-3320.

1916 (Mod. E)—Tim. Brgs.; (A) 4550-4520; (B) 5361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559c-552; (AA) 440-4320; (BB) 435-4320; (DD & EE) 415-412.

1916 (Mod. G, 1 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D) Bower, 309N; (E) Bower, 306N; Jackshaft, Bower, 306N.

1917-18 (Mod. J, 2 Ton)—(A) Bower, 310N; (B) Bower, 308N; (D & E) Bower, 311N.

1917 (D 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559c-552; (J & K) 539c-532; (AA) 415-412; (Hy, 27794; (BB, DD & EE) 335-3320; (BB) Hy, 36733; (DD & EE) Hy, 16516.

1917 (E 3-Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559c-552; (AA) 439-4320; (BB) 440-4320; (DD & EE) 415-412.

1917 (H-5)—Tim. Brgs.; (AA) 439-4320; (DD & EE) 415-412.

1919-20-21 (K2)—(Tim. Brgs. from A, B, C, K & AA-EE on all models)—(A) 4553-4520; (B) 4365-4320; (D) Br. 316-11; (E) Br. 315AL; (G) 456-452; (J) 3554-3520; (K) 480-452; (O) 328; (P) 205; (AA) 439; (BB) 435; (CC) 335; (DD & EE) 415.

1919-20-21 (J2)—(A) 3762-3720; (B) 3360-3320; (D & E) Br. 311N; (G) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4365-4320; (O) 208; (P) 205; (AA) 357; (BB) 336-419; (CC) 306; (DD & EE) 339.

1919-20-21 (H2)—(A) 4320-435; (B) 3121-3191; (D & E) Br. 311N; (G) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4365-4320; (O) 208; (P) 205; (AA) 337; (BB) 335; (DD & EE) 316.

1919-20-21 (G)—(A) 4320-435; (B) 3120-3191; (D) Br. 309NX; (E) 306NX; (G & H) Br. 306NX; (J) 335-3320; (K) 417-412; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

**BEST TRACT**—1919 (A-60)—(D) Tim, 6553-6520; (E) 6554-6520; (Bevel Gear Sleeve R. and L. Hand) 936-932; (AA & BB) 5551-5520; (DD) 5564-5520; (EE) 6554-6520.

**BETHLEHEM**—1916 (A-1-1½ Ton)—(D) Bower, 3762T; (E) Bower, 3362T.

1917-18 (Mod. A & D)—(A) Bock, 308; (B) Bock, 307; (D) Bower, 309N; (E) Bower, 307N; (G) Hy, 26219; (H) 208; (J) 306; (K) 406; (O) 205; (AA) 208; (BB) 307.

1917-18 (Mod. B)—(A) Bock, 310; (B) Bock, 308; (D) Bower, 5553T; (E) Bower, 4554T; (G) Hy, 26084; (H) Hy, 26085; (J) 307; (K) 407; (O) 205; (AA) 308; (BB) 307; (DD & EE) 305.

1918 (Mod. E)—(A) Bock, 310; (B) Bock, 308; (D) Bower, 4553T; (E) Bower, 3550T; (G) Hy, 26084; (H) Hy, 26085; (J) 307; (K) 407; (O) 205; (AA) 308; (BB) 307; (DD & EE) 305.

1918 (Mod. F)—(A) Bock, 310; (B) Bock, 308; (D) Bower, 5553T; (E) Bower, 4554T; (G) Hy, 26084; (H) Hy, 26085; (J) 307; (K) 407; (N) 309; (O) 205; (AA) 308; (BB) 307; (DD & EE) 305.

1919 (E-2½ Ton; F-3½ Ton)—(G) Hy, 26084; (H) Hy, 26085.

1919 (E 2½ Ton)—(A) 308DR; (B) 307DR; (J) 307DR; (K) 407; (O) 205; (Prop. Shaft Brg.) 309; (AA) 308; (BB) 307; (Internal Pinion Brg.) 407.

1919 (F 3½)—(A) 306DR; (B, J & BB) 307DR; (G) Hy, 26084; (H) Hy, 26085; (K) 407; (O) 205; (AA) 208DR; (Internal Pinion Brg.) 407; (GG) Hy, 29097.

1919 (D 1½ Ton)—(A) 310DR; (B) 308DR; (H) 208DR; (J) 306DR; (K) 406; (O) 205; (Prop. Shaft Brg.) 309; (AA) 308; (BB) 307; (DD & EE) 305; (Internal Pinion Brg.) 406.

1920 (¾ Ton)—(G) Hy, 29095.

1920 (1½ Ton)—(A) Bower, N308-108; (B) Bower, N307-107; (G) Hy, 26219; (GG) Hy, 29095.

1920 (2½ Ton)—(A) Bower, N310-110; (B) Bower, N308-108; (G) Hy, 26084; (H) Hy, 26085; (GG) Hy, 29095.

1920 (3½ Ton)—(A) Bower, N310-110; (B) Bower, N308-108; (G) Hy, 26084; (H) Hy, 26085; (GG) Hy, 29097.

**BETZ**—1920 (D-2)—(A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375E-6323; (AA) 344-3320; (BB) 339-333; (DD & EE) 319-313.

1920 (D-3)—(A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (AA) 344-3320; (BB) 339-333; (DD & EE) 319-313.

**BIDDLE**—1916-17 (F) Hy, 6681; (G & H) Hy, 26252.

1916-17 (D)—(D) Hy, 16681; (E) Hy, 26252; (G & H) Hy, 26056; (J) 307RT; (K) 407RT; (AA) 211; (BB) 307; (DD & EE) 306.

1916-17 (H)—(A) 339-3320 Tim.; (B) Tim, 237-2330.

1918 (H)—(D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

**BIMEL**—1916 (Mod. B & C)—(F, G, & H) 208; (J) 306; (AA) 207; (BB) 305.

1917 (Mod. D)—(F, G & H) 209; (J) 307; (Q) 205; (AA) 207; (BB) 305.

**BIRCH**—1918 (Super "4")—(G & H) Hy, 26216; (AA) Hy, 27797; (BB) Hy, 27889.

1920 (39)—(D) 306DR; (H) 306DR; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1920 (40)—(J) 306; (O) 205; (AA) 208; (BB) 305.

**BLAIR** 1916-17 (Mod. C)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (C) Tim, 341B-3320.

1916-17 (Mod. D)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (C) Tim, 443B-4320.

1916-17 (Mod. E)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (C) Tim, 5354B-5320.

**BOLLSTROM**—1920 (A-20)—(A) Hy, 26662; (B) 308DR; (D) Hy, 26662; (E) 308DR; (G & H) Hy, 26057; (I) 709; (J) 307DR; (K) Hy, 26777; (O) 305; (Q) 310DR; (AA) 1209-1309; (BB) 1309; (CC & FF) Hy, 18145; (DD) 1306; (EE) 1307.

1921 (B-21)—(A & D) Hy, 26662; (B) 308DR; (E) 308DR; (G & H) Hy, 26057; (I) 709; (J) 307DR; (K) Hy, 26777; (O) 205; (P) 308; (Q) 910; (AA) 1209-1309; (BB) 1309; (CC & FF) Hy, 18145; (DD) 1306; (EE) 1307.

**BOUR-DAVIS**—1916-17-18—(F) Hy, 16779; (G & H) Hy, 26056; (J) 0208; (K) 0408 (Q) 205; (AA) 208; (BB) 307.

1919 (18B)—(D) Hy, 16779; (E) Hy, 26056.

1920 (20-21)—(A) Br. 336TXL; (B) Br. 236TXL; (D) Hy, 16679; (E) Hy, 26056; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883; (GG) Hy, 29097.

1920-21 (21-S)—(A) Br. 419TX; (B) Br. 257TX; (F) 311DR; (G & H) Tim, 385-383; (J) 308DR; (K) Hy, 56654.

**BOURNE MAGNETIC**—1918 (VM)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (C) 341B-3320; (D & E) Tim, 5553-5520; (G & H) 559c-552; (J & K) 539c-532.

1918 (XM)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (D) Tim, 6552-6521; (E) 5755-5720; (G & H) Tim, 5756-5720; (J) 559c-552; (K) 6359-6320.

**BOWLING GREEN**—1918 (V)—(A) Tim, 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) Tim, 3762-3720; (G) 559c-552; (H) 456c-454; (J & K) 539c-532.

**BREWSTER**—1916-17 (Brewster-Knight)—(A) Tim, 415-412; (B) Tim, 316-312; (D) Tim, 395-3920; (E) Tim, 397-394; (AA) 211R. T. Gurney; (BB) 209R. Gurney.

1918-20 (Knight)—(A) 415-412; (B) 316-312; (D) 395-3920; (E) 397-394.

**BRIDGEPORT**—1920 (1½-Ton)—(CC & FF) Hy, 26839; (GG) Hy, 29097.

**BRIGGS-DETROITER**—1915 (Mod. C)—(F) 310; (G & H) 209; (J) 306; (K) 407; (Q) 304; (W & X) 311; (AA) 308; (BB) 306; (DD & EE) 305.

1915 (Mod. 8-D)—(F) 310; (G & H) 209; (J) 306; (K) 407; (O) 304; (Q) 304; (AA) 208; (BB) 306; (DD & EE) 305.

**BRISCOE**—1915 (Mod. 5-5)—(F) Hy, 16712; (G & H) Hy, 16711; (I) 2½ O. D. x 1½ I. D. x ½ ball brg.; (J) 2½ O. D. x 1½ I. D. x ½ ball brg.; (K) Hy, 16494; (O) Bantam Special; (Q) 2% O. D. x 1½ I. D. x ½; (AA) 208; (BB) 308; (LL) ½ Steel Ball.

1916 (Mod. 4-38)—(D & E) 0208; (G & H) Hy, 26253; (J) 0208; (K) 0308; (Q) Pr. St. Mfg. Co. No. 502½; (LL) ½ Steel Ball.

1916 (Mod. 8-38)—(G & H) Hy, 26253; (J) 0208; (K) 0308; (Q) Pr. St. Mfg. Co. No. 520½; (LL) ½ Steel Ball.

1916-17-18-19 (Mod. 4-24)—(F) Hy, 16218; (G & H) Hy, 26231; (O) Bantam "Special;" (Q) 1224A; (AA) 208; (BB) 206; (LL) ½ Steel Ball.

1919 (4-24)—(F) Hy, 16218; (G & H) Hy, 26231; (J) 342-3320; (K) 338-3320; (Q) A1224; (AA) 208.

1920-21 (4-34)—(F) Hy, 16218; (G & H) Hy, 26401; (J) 305DR; (K) 405; (AA) 208.

1920 (T-34)—(A) Tim, 435-4320; (B) Tim, 3191-3120.

**BRISCOE & STAHL**—1920—(A & B) Br. 317TX; (D & E) Br. 208AX.

**BROCKWAY**—1916 (Mod. K)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559c-552; (J & K) 539c-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

1917 (J-3-1½ Ton)—(A) Bower, 308N; (B) Bower, 307N.

1918 (K-3-2 Ton)—(A) Bower, 310N; (B) Bower, 309N; (D) 314NDT.

1918 (R-3½ Ton)—(A) Bower, 313N; (B) Bower, 312N; (D) Bower, 317NDT.

1919-20-21 (S2, S3, 1½ Ton)—(A) Bk, N308-108; (B) Bk, N307-107; (F) 311DR; (G & H) 215DR; (J) 407; (K) 408DR; (N) SKF407; (O) 205; (P) Tim, 277-274; (Q) 209; (BB) Tim, 339-333; (CC) Tim, 235; (DD & EE) 306; (GG) C-600; (KK) Gemner, 10115; (LL) Gemner, 11127.

1919 (K-3)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (D & E) 5553-5520; (G & H) Tim, 559c-552; (J & K) Tim, 539c-532; (O) 205; (P) 208; (Q) 209; (AA) Tim, 415-412; (BB, DD & EE) Tim, 335-3320; (CC) Tim, 257; (GG) C-600; (KK) Gemner, 10115; (LL) Gemner, 11127.

1919 (R)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (D) Tim, 6552-6521; (E) Tim, 5755-5720; (G & H) 5756-5720; (J) Tim, 559c-552; (K) 6375E-6320C; (O) 205; (P) 208; (Q) 209; (AA) Tim, 415-412; (BB, DD & EE) 335-3320; (CC) 257; (GG) C-600; (KK) Gemner, 10115; (LL) Gemner, 7192.

1919-20 (T)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 6552-6521; (E) Tim, 5755-5720; (G & H) 780-772; (J & K) Tim, 6375E-6320C; (O) 205; (P) 208; (Q) 209; (AA) Tim, 439-4320; (BB) Tim, 435-4320; (CC) 335; (DD & EE) 415-412; (GG) C-879; (KK) Gemner, 8145; (LL) Gemner, 8108.

1920 (K-4)—(A) Tim, 4558-4520; (BB) Tim, 3360-3320; (D & E) Tim, 5557-5520; (G & H) Tim, 559-552; (J) Tim, 539c-532; (K) Tim, 5578E-5521; (O) 205; (P) 208; (Q) 209; (AA) Tim, 337-3320; (BB) Tim, 339-333; (CC) Tim, 306; (DD & EE) Tim, 319-313; (GG) C-600; (KK) Gemner, 10115; (LL) Gemner, 11127.

1920 (R-2)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (D) Tim, 6552-6521; (E) Tim, 5755-5720; (G & H) Tim, 5756-5720; (J) Tim, 559c-552; (K) Tim, 6375E-6320; (O) 205; (P) 208; (Q) 209; (AA) Tim, 336-3320; (BB) Tim, 337-333; (CC) Tim, 306; (DD & EE) Tim, 339-333; (GG) C-600; (KK) Gemner, 7194; (LL) Gemner, 7192.

**BUFFALO**—1915 (Mod. 36)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

**BUICK**—1915 (Mod. 24 & 25)—(F) Hy, 16691; (G) Hy, 26062; (AA) 208; (BB) 307.

1915 (6-C-55, 35 & 37)—(F) 312; Hy, 16692; (G & H) 211; Hy, 26059; (J) 307; (K) 407; (AA) 210; (BB) 307.

(Mod. E-37, 35 & E4)—(J) 306; (K) 307; (BB) 306.

1916 (Mod. 45)—(G & H) Tim. Brgs., 366-363.

1916 (Mod. D-34, 35)—(J) D. R. 306; (K) 307.

1916 (F) 310; (G & H) 210; (J) 307; (K) 407; (BB) 307.

1916-17 (D44-45-47)—(D & E) D. R. 310; (G & H) D. R. 210; (J) 307; (K) 407; (O) 20-

1916 (D54-55)—(F) 312; (G & H) 211; (J) 308; (K) 408; (AA) 210; (BB) 307.

1916 (1,500-lb. Truck)—(J) 307; (K) 1407; (AA) 208; (BB) 307.

1917 (Mod. D-35)—(F) Hy, 26394; (G & H) Hy, 26223; (J) 306; (K) 307; (AA) Hy, 16479; (BB) 306.

1917 (Mod. E-49 & Large 6)—(A) Tim, 337-3320; (B) Tim, 236-2330; (F) 311; (G & H) Tim, 377-3720; (J) 307; (K) 407; (AA) 209; (BB) 307.

1917 (Mod. E-45 & Medium 6)—(A) Tim, 275-2720; (B) Tim, 236-2330; (F) 310; (G & H) Tim, 366-363; (J) 307; (K) 407; (AA) 209; (BB) 307.

1918 (Mod. E-34-5)—(F) Hy, 26394; (G & H) Hy, 26223; (J) 306; (K) 307; (BB) 307; (AA) Hy, 16479.

1918 (Mod. E44-45)—(F) 310; (J) 307; (K) 407; (BB) 307.

1918 (Mod. E49-50)—(F) 311; (J) 307; (K) 407; (BB) 307.

1919 (H-44-45-46)—(F) 310DR; (J & BB) 307DR; (K) 407; (AA) 209DR.

1919 (H-47)—(A) Tim, 337-3320; (B) Tim, 236-2330; (F) 310DR; (G & H) Tim, 377-3720; (J & BB) 307DR; (K) 407; (AA) 209DR.

1919 (H-49)—(F) 311DR; (J & BB) 307DR; (K) 407; (AA) 209DR.

1919 (H-50)—(A) Tim, 275-



## CADILLAC—(Cont.)

1912—(DD & EE) 306.  
 1914 (Pleas.)—(A) Tim, 415-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D & E) Tim, 375-3720; (G) Tim, 455-4520; (H) Tim, 559-552; (J) Tim, 445-4320; (K) Tim, 457-454; (N) Tim, 598-592; (O) 206; (BB) 406; (DD & EE) 306.  
 1915 (Type 5 8-Cyl. Pleas.)—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D & E) Tim, 375-3720; (G) Tim, 462-454; (H) Tim, 559T-552; (J) Tim, 415T-412A; (K) Tim, 461T-454; (O) 206; (BB) 407; (DD & EE) 307.  
 1916 (Type 53 Pleas.)—(A) Tim, 419-412; (B) Tim, 316-312; (D & E) Tim, 375-3720; (G) Tim, 462T-454; (H) Tim, 559T-552; (J) Tim, 415T-412A; (K) Tim, 461T-454; (O) 206; (BB) 407; (DD & EE) 307; (CC) 205.  
 1917 (Type 55 Pleas.)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 462T-454; (H) 559T-552; (J) 415-412; (K) 462T-454.  
 1918 (57)—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D & E) Tim, 375-3720; (G) 462T-454; (H) 559T-552; (J) 415-412; (K) 456-454; (CC) Hy, 16942; (DD & EE) Hy, 17989.  
 1919-20 (59)—Tim. Brgs. from A-K—(A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 462T-454; (H) 559T-552; (J) 461T-454; (K) 415T-412A; (O) 206; (AA) 309; (BB) 407.  
 1920 (57)—(CC) Hy, 16942; (DD & EE) Hy, 17989.

## CAMPBELL—1918—(G &amp; H) Hy, 26216.

## CARNATION—1914—(F) Hy, 16042; (G &amp; H) Hy, 26069.

CARROLL—1920—(A) Tim, 336-3320; (B) Tim, 236-2320; (F) 310DR; (G & H) 366-363.  
 1921—(A) Br, 419TX; (B) Br, 257TX; (F) 311DR; (G & H) Tim, 385-383; (J) 308DR; (K) Hy, 56654.

## CARTER CAR—1915 (Mod. 9C)—(F) 309.

CASE—1915 (Mod. R)—(A) Tim, 339-333; (B) Tim, 235-2330; (D & E) Hy; (G & H) Hy; (J) 308; (K) 405; (AA) Tim, 336-333; (BB) 346-333; (DD & EE) Tim, 237-233.  
 1914 (Mod. S)—(F) 311; (G & H) Hy; (J) 307; (K) 407; (AA) Tim, 337-3320; (BB) Tim, 335-3320; (DD & EE) 257-2520.  
 1915—(A) Tim, 339-333; (B) Tim, 235-2330; (AA) Tim, 336-333; (BB) Tim, 346-333; (DD & EE) Tim, 237-233.  
 1914-15 (Mod. O-40)—Tim. Brgs.: (A) 415-412; (B) 316-312; (D & E) Tim, 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (A) Ann, 1205; (AA, BB, DD & EE) 335-3320.  
 1915 (Mod. S-35)—Tim. Brgs. (G & H) Hy, 26056; (AA) 337-3320; (BB) 335-3320; (DD) 316-312.  
 1915 (R-15 or 25-1916T)—(F) Hy, 16675; (G) Hy, 26056; (H) 26083.  
 1915 (R-15 or 25)—(F) Hy, 16675; (G) Hy, 26059; (H) Hy, 16232.  
 1916 (Mod. T)—(A) Tim, 339-333; (B) Tim, 235-2330; (D, E, G & H) Hy; (J) Bock, 418; (K) Bock, 315; (AA) Tim, 336-333; (BB) Tim, 346-333; (DD & EE) Tim, 237-233.  
 1915-17 (25 H. P. 4-Cyl.)—Tim. Brgs.: (A) 339-333; (B) 235-330; (AA) 336-333; (BB) 346-333; (DD & EE) 237-233.  
 1917 (Mod. T)—(A) Tim, 339-333; (B) Tim, 235-2330; (F) Hy, 16681; (G & H) Hy, 26056; (J) 208RT; (K) 407RT; (AA) Tim, 336-333; (BB) 346-333.  
 1915 (Mod. 25), 1916 (Mod. T-17), 1917 (Mod. T-17)—(O) 5305; (P) 5209.  
 1918 (U 6-Cyl.)—(A) Bock, 418; (B) Bock, 258; (D, E, G & H) Bock, 375; (J) Bock, 335; (K) Bock, 418; (AA) 210; (BB) 307; (DD) 305; (EE) 306.

CASE—1920-21 (V)—(A) Bk, 418-41; (B) Bk, 257-25; (D, E, G & H) Bk, 375-37; (J) Bk, 335-33; (K) Bk, 449-43; (O) 205; (P) 308; (BB) 307; (DD) 305; (EE) 306.

CHALMERS—1915 (Mod. 29)—Tim. Brgs.: (A) 444-4320; (B) 316-312; (C) 3653B-3620; (D, E & G) 375-3720; (H) 455-453; (J) 337-3320; (K) 4367-4320; (AA) Hy, 16589; (BB) Hy, 16588; (DD & EE) Hy, 16555.  
 1915 (Mod. 26-30, 6-45A-B-C)—Tim. Brgs.: (A) 418-412; (B) 316-312; (C) 3658B-3620; (D & E) 365-363; (G & H) 375-3720; (AA) Hy, 16498; (BB) Hy, 26601; (DD & EE) Hy, 16555.

1915 (Mod. 32A, 6-40)—(A) Tim, 278-2730; (B) Tim, 258-253; (D & E) Hy, 16676; (G & H) Tim, 385-383; (J) Hy, 16551; (AA) Hy, 26485; (BB) Hy, 26677.  
 1916 (Mod. 32B, 6-40)—Tim. Brgs.: (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375-3720; (J) 255-2520; (K) 417-412; (AA) Hy, 26485; (BB) Hy, 26677.  
 1916 (Mod. 5-15-35A, 6-30)—(A) Tim, 257-2520; (B) Tim, 235-2320; (D & E) Tim, 415T-412A; (G) Tim, 288-284; (H) Tim, 355-3520; (J) Tim, 334-3320; (K) Tim, 258-2520; (R) Hy, 17024; (AA) Hy, 16820; (BB) Hy, 16481; (DD) Hy, 17799; (EE) Hy, 16506.  
 1916 (Mod. 26)—(A) Tim, 418-412; (B) 315-312; (C) Tim, 3658B-3620; (D & E) Tim, 365-363; (G & H) Tim, 375-3720; (J) Hy, 16488; (AA) Hy, 16498; (BB) Hy, 26601; (DD & EE) Hy, 16555.

1916 (6-54 Master Six)—(AA) Hy, 16589; (BB) Hy, 16588; (DD & EE) Hy, 16555.  
 1917 (Mod. 6-35)—Tim. Brgs.: (A) 257-2520; (B) 235-2320; (D) 415T-412A; (G) 288-284; (H) 355-3520; (J) 334-3320; (K) 258-2520; (AA) Hy, 17024; (BB) Hy, 16481; (DD) Hy, 17799; (EE) Hy, 16506.

1917 (Mod. 35C)—Tim. Brgs.: (A) 317-312; (B) 2382-2320; (D) 415T-412A; (G & H) 359-3520; (J) 257-2520; (K) 3381-3320.

1917-18-19 (6-30 5 Pass.)—(A) Tim, 317-312; (B) Tim, 2382-2320; (D) Tim, 415T-412A; (G & H) Tim, 359-3520; (J) Tim, 57-2520; (K) Tim, 3381-3320; (AA) Hy, 16820; (BB) Hy, 16481; (DD) Hy, 17799; (EE) Hy, 16506.

1917 (Large 6, 35B, 7-22 & 30)—(A) Tim, 337-3320; (B) Tim, 236-2330; (D) Tim, 435T-4320; (G & H) Tim, 375T-3720; (J) Tim, 255-2530; (K) Tim, 417-412; (P) Hy, 17024; (AA) Hy, 16820; (BB) Hy, 16481; (DD) 17799; (EE) Hy, 16506.

1917 (6-30 5 Pass.)—(A) Tim, 257-2520; (B) Tim, 235-2320; (G) Tim, 288-284; (H) Tim, 355-3520; (J) Tim, 334-3320; (K) Tim, 258-2520; (AA) Hy, 17024; (BB) Hy, 16481; (DD) Hy, 17799; (EE) Hy, 16506.

1918-19 (7 Pass.)—(A) Tim, 337-3320; (B) 2362-2330; (D) Tim, 435T-4320; (G & H) Tim, 375T-3720; (J) Tim, 255-2520; (K) Tim, 417-412; (AA) Hy, 17024; (BB) Hy, 16481; (DD) Hy, 17799; (EE) 16506.

1920 (35B)—Tim. Brgs. from A-K—(A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

1920 (35C)—Tim. Brgs. from A-K—(A) 317-312; (B) 2382-2320; (D) 415T-412A; (G & H) 369T-3520; (J) 257-2520; (K) 3381-3320.

1920—(A) Hy, 16658; (G) Hy, 26269; (AA) Hy, 16553; (GG) Hy, 26245.  
 1920—(AA) Hy, 47024; (BB) Hy, 16481; (CC) Hy, 16820; (DD) Hy, 17799; (EE) 16506.

CHANDLER—1914 (Mod. 15B)—(A) Tim, 337-3320; (B) Tim, 235-2320; (D & E) 310; (F) 310; (G & H) 210; (J) 207; (K) 407; (O) 205; (AA) 307; (BB) 307; (CC) 304; (DD & EE) 306.

1915 (Mod. 16)—(A) Tim, 337-3320; (B) Tim, 235-2320; (D & E) 310; (F) 310; (G & H) 210; (J) 207; (K) 407; (O) 205; (AA) 208; (BB) 307; (DD) 305; (EE) 306.

1916 (Mod. 17)—(A) Tim, 337-3320; (B) Tim, 235-2320; (D & E) 310; (G & H) 210; (J) 207; (K) 407; (O) 205; (AA) 210; (BB) 307; (CC) 210; (DD) 305; (EE) 306.

1917 (Mod. 18)—(A) Tim, 337-3320; (B) Tim, 235-2320; (D & E) 310; (G & H) 210; (J) 207; (K) 407; (O) 205; (O) 205; (AA) 210; (BB) 307; (CC) Hy, 16820; (DD) 305; (EE) 306.

1918 (Mod. 25)—(A) Tim, 337-3320; (B) Tim, 235-2320; (D & E) 310; (G & H) 210; (J) 207; (K) 407; (O) 205; (AA) 210; (BB) 307; (CC) Hy, 16820; (DD) 305; (EE) 306.

1919—Same as 1918, except Main Shaft Front uses 308 instead of 210.

1919-20-21 (A) Bk, 337-33; (B) Bk, 235-23; (F) 310; (G & H) 210; (J) 207; (K) 407DR; (O) 205; (P) 308; (Q & R) B. & B.; (S) 307; (DD) 305; (EE) 306.

CHASE (Truck)—1915 (Mod. O)—(A) 310; (B) 309; (F) 317; (G & H) 219; (I) Rh, 311 OD or SKF 918; (J) 409; (K) 410; (M) Rh, 310D; (O) 205; (Q) 209; (AA & BB) Tim, 357; (CC) 308; (DD & EE) Tim, 339; (GG) ND03.

1915 (Mod. R)—(D) 310; (E) 309; (G & H) 216; (M) Rh, 310TD; (O) 205; (Q) 209; (AA) Tim, 337; (BB) Tim, 335; (DD & EE) Tim, 316; (GG) ND03.

1915 (Mod. T)—(D & E) 311; (G & H) 215; (O) 205; (Q) 209; (AA) Tim, 277; (BB) Tim, 339; (DD & EE) Rh, 306A.

1916-17-18 (A 1 Ton)—(A) Bower, 308N; (B) Bower, 307N.  
 1916-17-18 (B 2 1/2 Ton)—(A) Bower, 312N; (B) Bower, 311N.  
 1916-17-18 (X 3 Ton)—(A) Bower, 313; (B) Bower, 312N; (D & E) Bower, 317NDT.

HEVROLET—1915 (Mods. H2, H2 1/2)—(F) Hy, 16018; (G & H) Hy, 26062; (J) 0306; (K) 307; (AA) SR1209; (BB) SR1307; (CC) 307.

1915 (Light Six)—(AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.

1915 (Mods. H2, H2 1/2)—(J) 0306; (K) 307; (AA) SR1209; (BB) 307; (CC) 307.

1916 (Little Six)—(J & K) Hy, 2,3285° O. D. x 3°.

1917-18-19 (Mod. D)—(F) Hy, 16530; (G & H) Hy, 16217; (K) Hy, 26577; (L) 308; (AA) 207; (BB) 209; (CC) 307.

1918-19-20 (Mod. T)—(A) Tim, 337-3320; (B) Tim, 236-2330; (F) 310; (G & H) ND. 0311; (J) 307; (L) 408; (N) 207; (BB) 307; (AA) 210.

1916 (Baby Grand Mod. H)—(F) Hy, 16018; (G & H) Hy, 26062; (J) ND. 0307; (K) ND. 0306; (AA) 207; (BB) 209; (CC) 307.

1917-18 (Baby Grand Mod. F, FA)—(F) Hy, 16530; (G & H) Hy, 16217; (K) Hy, 26577; (AA) 207; (CC) 307.

1916-17-18-20 (490)—(F) Hy, 16483; (G & H) Hy, 16221; (K) Hy, 26621; (O) Spec. 7 Balls 1/2"; (AA) 207; (BB) 306.

1919 (Baby Grand Mod. FB)—(A) ND-D 337; (B) ND-D 336; (F) Hy, 16530; (G & H) Hy, 16217; (K) Hy, 26577; (AA) 210; (CC) 307.

1920 (Baby Grand Mod. FB)—(A) ND-D 337; (B) ND-D 336; (F) Hy, 16530; (G & H) 16217; (J) 406; (K) 306; (AA) 210; (CC) 307.

1919 (490)—(D & E) Hy, 16483; (G & H) Hy, 16221; (J) Hy, 26221; (AA) 207; (BB) 306.

1920 (490)—(D & E) Hy, 16483; (G & H) Hy, 16221; (J) Hy, 26221; (AA) 207; (BB) 306.

1920 (3 1/2 Ton)—(A) 14120-14273; (B) 09075-6-09194

1920 (1 1/2 Ton)—(A) 337-3320; (B) 2382-2330.

1920 (1 Ton)—(A) Tim, 337-3320; (B) Tim, 236-2330; (D & E) Hy, 46580; (G & H) Hy, 16217.

1921 (490)—(G & H) 209RT; (J) 305DR; (K) 307; (AA) 207; (BB) 306.

CHICAGO—1920 (C 1 1/2 Ton)—(O) 205; (DD & EE) 306.

CLASSIC—1917—(D & E) Bower, 208A.

CLEVELAND—1920 (40)—Tim. Brgs. from A-K—(A) 2786-2720; (B) 1751-1730; (D) 415-412; (G & H) 377-3720; (J) 257-2520; (K) 3191-3120; (Q) Spec.; (AA) 207; (BB) 306.

CLYDESDALE—1918—(A) Br, 308AXL; (B) Br, 305AXL.

1920-21 (32X)—Bock Brgs. from A-K—(A) 435; (B) 316; (D & E) N211; (G & H) N212; (J & K) N309.

COLE—1914-15 (4 & 6 Cyl.)—(O) 0208; (AA) 212; (BB) 307; (DD & EE) 306.

1915 (4-40)—(A) Tim, 337-3320; (B) 236-2330; (D) Tim, 435T-4320; (G & H) Tim, 375T-3720; (J) Tim, 255-2530; (K) Tim, 417-412; (O) 0208; (AA) 212; (BB) 307; (DD & EE) 306.

1915 (6-5)—(O) 0305; (AA) 212; (BB) 307.

1916 (6-66)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (A) Ann, 212; (BB) Ann, 307.

1916 (8-850)—Tim. Brgs.: (A) 337-3320; (B) 236-2330; (D & E) 435-4320; (G & H) 375-3720; (J) 255-2530; (K) 417-412. On rear axle square type, use 416-412; and 258-2520 on pinion shaft front and rear.

(Mod. 860)—(A) Bock, 418; (B) Bock, 258; (D & E, G & H) Bock, 375; (J) Bock, 335; (K) Bock, 417.

Mod. 870)—(A) Bock, 418; (B) Bock, 235; (D & E) Bock, 375; (J) Bock, 337; (K) Bock, 417.

1919-20-21 (870)—Bock Brgs. from A-K—(A) 418-41; (B) 257-25; (C) Spec.; (D, E, G & H) 375-37; (J) 335-33; (K) 449-43; (P) 212; (BB) 307DR.

COLEMAN—1916 (1 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D & E) Bower, 312NDT; (AA) Hy, 27794; (BB) Hy, 36733; (DD & EE) Hy, 16516; (FF) Hy, 16948.

1916 (2 Ton)—(AA) Hy, 26557; (BB) Hy, 26697; (DD & EE) Hy, 16688.

1916 (3 Ton)—(AA) Hy, 27889; (BB) Hy, 27896; (DD & EE) Hy, 16748.

COLLIER—1918 (17)—(A) Br, 308AX; (B) Br, 305AXL.

1920 (18-19)—(A) Bk, 435; (B) Bk, 316; (E Axle Shaft) Tim, 6378-6320; (G & H) Tim, 477-473; (J) 456-453; (K) 539E-532; (P) 307DR; (AA) 208; (BB) 307; (DD) 304; (EE) 305.

1920 (21-22)—Tim. Brgs. from A-K—(A) 4554-4500; (B) 3381-3320; (E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (P) 308DR; (AA) 304; (BB) 308; (DD & EE) 306.

COLUMBIA—1916-17-18—(O) 205.

1918 (E. T. 2 Ton)—(D) Bower, 3353T; (E) Bower, 4554T; (G) Hy, 26084; (H) Hy, 26085 (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.

COLUMBIA (Of Pontiac, Mich.)—1919 (E)—(A) Tim, 3762-3720; (B) 3360-3320; (D) Br, 5553T; (E) Br, 4554T; (G) Hy, 26084; (H) Hy, 26085; (J) 307DR; (K) 407; (AA) Hy, 27794; (BB) Hy, 26733; (CC) Hy, 16949; (DD & EE) Hy, 16516; (FF) Hy, 16948; (GG) Hy, 29097.

1920 (G)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (D) Br, 5553T; (E) Br, 4554T; (G) Hy, 26084; (H) Hy, 26085; (J) 307DR; (K) 407; (O) 205; (AA & BB) 308; (DD) 305; (EE) 306.

COLUMBIA SIX—1919-20-21 (All Mod.)—(A) Tim, 317-312; (B) Tim, 2382-2330; (D & E) Tim, 415T-412A; (G & H) Tim, 359-3320; (J & K) Tim, 3381-3320; (S) 307.

COMET—1918 (C-50)—(F) Hy, 16691; (G & H) Hy, 26227; (AA) Hy, 27797; (BB & EE) Hy, 26972; (FF) Hy, 26956.

1919 (C-52)—(A) Bk, 337-33; (B) Bk, 235-23; (G & H) Bk, 355-35; (J) 317-31; (K) Bk, 340-33; (GG) Hy, 29097.

1920 (C-53)—(A) Bk, 337-33; (B) Bk, 235-23; (G & H) Bk, 355-35; (J) Bk, 317-31; (K) Bk, 340-33; (O) 205; (AA) 208; (BB) 207; (CC) Hy, 16828; (DD &



## CONESTOGA—Continued

1920 (1 Ton)—(GG) Hy, 29097.  
1920 (3/4 Ton)—(A) 435; (B) 316.

CONSOLIDATED CAR CO.—1917 (6-44)—(A) Br, 308AXL; (B) Br, 305AXL; (F) Hy, 16779; (G & H) Hy, 26056; (J) 278; (K) 407RT.

CONTINENTAL—1919-20-21 (K, L, M-K, M, N, P) —(G & H) Tim, 5567-5500; (AA-Outer) 456-45; (AA-Inner) 559-55; (DD & EE) 415-41.

CORBITT—1916-17 (Mod. F, 1-1 1/2-2 Ton)—(AA) Tim, 337-3320; (BB) Tim, 335-3320; (DD & EE) 316-312.

1917-18 (A-3 1/2 Ton)—(D & E) Bower, 317NDT.

1917-18 (B-2 1/2 Ton)—(D & E) Bower, 314NDT.

1918 (AA-5 Ton)—(D & E) Bower, 319NDT.

1919 (E-1 Ton)—(A) 308DR; (B) 307DR; (F) 311DR; (G & H) 215DR; (J) 407; (K) 410.

1919 (D-1 1/2 Ton)—(A) 309DR; (B) 308DR; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410.

1919 (C-2, B-2 1/2)—(A) 310DR; (B) 309DR; (F) 314DR; (G & H) 217DR; (J & K) 408.

1919 (A-3 1/2 Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219 (J) 409; (K) 413.

1919 (AA-5 Ton)—(A) 312DR; (B) 311DR; (F) 319DR; (G & H) 220DR; (J) 407; (K) 414; (O) 205.

1920 (E-1, D-1 1/2 Ton)—(AA) Tim, 277-274; (BB) Tim, 339-333; (GG) Hy, 29095.

1920 (C-2 Ton)—(AA) Tim, 337-3320; (BB) Tim, 335-3320; (DD & EE) 316-312; (GG) Hy, 29097.

1920 (B-1 1/2, A-3 1/2 Ton)—(AA & BB) Tim, 357-353; (DD & EE) Tim, 339-333; (GG) Hy, 29097.

1920 (AA-5 Ton)—(AA & BB) Tim, 439-4320; (DD & EE) Tim, 415-412; (GG) Hy, 18130.

CORNELIAN—1915 (Sp. Racer)—(A) 305; (B) 304; (D) 308; (E) 207; (G) 208; (H) 208; (J) 0307; (K) 0407; (AA) 305.

1915 (Lt. Car)—(A & B) 205; (D) 0209; (E) 0212; (G & H) 0208; (J) 0307; (K) 0407; (AA) 205.

COWLES-McDOWELL—1915 (Mod. 6-30)—Tim. Brs.; (A) 337-3320; (B) 236-2330; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (Q) Ann, 205.

CRAWFORD—1915 (Mod. 6-35)—Tim. Brs.; (A) 337-3320; (B) 236-2320; (D) 439T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 339-333; (B) 277-274.

1916 (3 Ton)—(AA) Tim, 337-3320; (BB, DD & EE) Tim, 335-3320.

1916 (1 1/2 & 2 Ton)—(AA) Tim, 337-3320; (BB) Tim, 335-3320; (DD & EE) Tim, 316-312.

1916 (Mod. 6-35)—Tim. Brs.; (A) 337-3320; (B) 236-2320; (D) 435T-4320; (G & H) 375-3720; (J) 415T-412; (K) 258-2520; (AA) 277-274; (BB) 339-333.

1917 (Mod. 30-40)—Tim. Brs.; (A) 355-3520; (B) 316-312; (D) 456-4520; (E, G & H) 375-3720; (J) 335-3320; (K) 435-4320; (AA) 336-3320; (BB) 375-3720; (DD & EE) 316-312.

1919—Tim. Brs. from A-K on all models—(A) 415T-412A; (B) 2382-2330; (D & E) 435T-4320 (G & N) 375-3720 (J) 415T-412; (K) 258-2520.

1919 (Spec. 1 Ton)—(D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412.

1919 (2 Ton)—(A) 4554-4520; (B) 3381-3320; (J) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4368-4320.

1920 (A) 415-412A; (B) 2382-2330; (D & E) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (AA) 277-274; (BB) 339-333.

1920 (2 Ton)—(A) 4554-4520; (B) 3381-3320; (G) 3762-3720; (H) 375-3720; (J) 335-3320; (K) 4368-4320.

1921 (A) 415-412A; (B) 2382-2330; (D & E) 458T-454; (G & H) 375T-3720; (J) 317-312; (K) 439T-432; (AA) 277-274; (BB) 339-333.

CROCE (Truck)—1916 (750 lbs.)—Tim. Brs.; (A) 339-333; (B) 255-2530; (D, E, G & H) 375-3720; (J) 255-2530; (K) 417-412; (AA) 337-3320; (B) 415-412; (DD & EE) 335-3320.

1916 (1 1/2 Ton)—Tim. Brs.; (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 337-3320; (BB) 415-412; (DD & EE) 335-3320.

1917 (1 1/2 Ton)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (C) 341-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 336-3320; (BB) 357-353; (DD & EE) 339-333.

1917 (2 1/2 Ton)—Tim. Brs.; (A) 4550-4520; (B) 440-4320; (C) 443-4320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 336-3320; (BB) 357-353; (DD & EE) 339-333.

CROW-ELKART—1915 (Mod. E-25)—(D & E) 208; (G & H) Hy, 26216; (AA) Hy, 26518; (BB) Hy, 26737; (DD & EE) Hy, 16517.

1915 (E-55) (F) Hy, 16681 (G & H) Hy, 26056; (AA) Hy, 27788; (BB) Hy, 26728; (DD & EE) Hy, 16506.

1916 (Mod. C-30)—(G & H) Hy, 26216; (AA) Hy, 26518; (BB) Hy, 26737; (DD & EE) Hy, 16517; (O) 308.

1917 (Crow-Elkart)—(D & E) Bower, 208; (G & H) Hy; (J) 0208; (K) 0406; (Q) 306.

1918 (G & H)—Hy, 26216; (AA) Hy, 27797; (BB) Hy, 27899.

1919-20 (H)—(A) Tim, 317-312; (B) Tim, 235-2330; (D & E) Tim, 277-274; (G & H) Hy, 26216; (AA) Hy, 27797.

CUNNINGHAM—1910 (Amb.)—Tim. Brs.; (A) 336-3320; (B) 316-312; (C) 3650-3620; (D, E & G) 375-3720; (H) 395-3920; (J) 336-3320; (K) 435-4320.

1911 (Pleas.)—Tim. Brs.; (A) 337-3320; (B) 315-312; (D, E & G) 375-3720; (H) 395-3920; (J) 336-3320; (K) 435-4320.

1912 (Amb. J.)—Tim. Brs.; (A) 419-412; (B) 316-312; (C) 3656-3620; (D, E & G) 375-3720; (H) 456-4520; (J) 336-3320; (K) 435-4320.

1912-13 (Pleas. J.)—Tim. Brs.; (A) 336-3320; (B) 316-312; (C) 3650-3620; (D, E & G) 375-3720; (H) 456-4520; (J) 336-3320; (K) 435-4320.

1913 (Amb.)—Tim. Brs.; (A) 336-3320; (B) 316-312; (C) 3650-312; (C) 3650-3620; (D & E) 375-3720; (G) 456-4520; (H) 559-552; (J) 439-4320; (K) 539-532.

1913 (Pleas.)—Tim. Brs.; (A) 419-412; (B) 316-312; (C) 3650-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (AA) Ann, 311; (BB) Ann, 409; (DD & EE) Ann, 307.

1914 (Amb. & Pleas.)—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D) Tim, 462-4520; (E) Tim, 375-3720; (G) Tim, 456-454; (H) Tim, 559-552; (J) Tim, 439-4320; (K) Tim, 439-4320; (AA) Ann, 311; (BB) Ann, 409; (DD & EE) Ann, 307.

\*1915-16-17 (Mod. S-U-V-2)—Tim. Brs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 462-4520; (E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (O) Ann, 205; (AA) 337-3320; (BB, DD & EE) 335-3320; (CG) Ann, 205; 3762-3720; (G) 559-552; (H) 456-454; (J & K) 539-532; (AA & BB) 337-3320; (DD & EE) 5335-3320.

1915 (L 4 Ton)—Tim. Brs.; (A) 5550-5520; (B) 5361-5320; (C) 4254-5320; (D) 6552-6521; (E) 5755-5720; (G) 5756-5720; (H) 5755-5720; (J & K) 559-552; (N) 440-4320; (AA & BB) 440-4320; (DD & EE) 415-412.

1915 (L 3 Ton)—Tim. Brs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E & H) 5755-5720; (G) 5756-5720; (J & K) 559-552; (N, AA & BB) 440-4320; (DD & EE) 415-412.

1915 (J 1/2, 1, 2, 3 Ton)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G) 559C-552; (H) 559-552; (J & K) 539 532; (N, BB, DD & EE) 335-3720; (AA) 337-3320.

1916 (J-1)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (G) 3762-3720; (G) 559C-552; (H) 456C-452; (J & K) 539C-532; (AA) 277-274; (BB) 339-333.

1916 (J-A)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (D) 462-4520; (E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 357-353; (BB) 339-333.

1916-17 (J 3, 2 Ton)—Tim. Brs.; (A) 4558-4520; (B) 3360-3320; (D) 341B-3320; (D & E) 5553-5520; (G & H) 5593-552; (J & K) 539C-552; (BB, DD & EE) 335-3320; (AA) 337-3320.

1916 (Mod. L)—Tim. Brs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G) 5756-5720; (J & K) 559C-552; (AA & BB) 357-353; (DD & EE) 339-3320.

1917 (J-4 1 1/2 Ton)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (N) 335-3320; (AA) 277-274; (BB) 339-333.

1917 (J-5 1 Ton)—Tim. Brs.; (A) 3750-3720; (B) 3760-3320; (D & E) 5550-5520; (G & H) 477-473; (J & K) 456-453; (AA) 277-274; (BB) 339-333.

1917 (L 3 1/2 Ton)—Tim. Brs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (N) 440-4320; (AA & BB) 357-353; (DD & EE) 339-333.

1917 (R 5-Ton)—Tim. Brs.; (A) 5550-5520; (B) 5351 5321; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1920 (V4-1)—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D & E) 375-3720; (G) 462-454; (H) 559-552; (J) Tim, 439-432; (K) Tim, 539-532; (S) 205; (AA) 337; (BB) 335; (CC) 257 cone; (DD & EE) 307.

1921 (V4-2)—(A) Tim, 316-312; (B) Tim, 438-4320; (C) 1106F; (D & E) Tim, 375-3720; (G) Tim, 462-454; (H) Tim, 559 532; (J) Tim, 439-432; (K) Tim, 539-532; (S) 205; (AA & BB) Tim, 357-353; (CC) Tim, 14118; (DD & EE) 307.

DANIELS—1917 (Mod. A)—Tim. Brs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (O) Ann, 205; (AA) 277-274; (BB) 339-333; (DD & EE) Ann, 306.

DANIELS 8—1919-20-21 (D-19)—Tim. Brs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 462-454; (H) 559-552; (J) 439-432; (K) 539-532; (O) 305; (P) 308; (Q) 209; (AA) 308 & 305; (BB) 308; (CC) 305; (DD) 306; (EE) 307; (GG) 303 & 304.

DART—1916-17-18 (Mod. E)—Tim. Brs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.

1914 (1 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D) Bower, 310N; (E) Bower, 309N.

1914 (1000 lbs.)—(F) Hy, 16792; (G & H) Hy, 26056.

1915-16 (1000 lbs.)—(F) Hy, 16681; (G & H) Hy, 26056; (AA) Hy, 26518.

1916-17-18 (Mod. CC) Tim Brs.; (A) 4558 4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1916-17 (Mod. AA & BB)—Tim. Brs.; (A) 415-412; (B) 316-312; (D) 435T-4320; (G & H) 375T-3720; (J & K) 4365-4320.

1918-19 (Mod. E)—Tim. Brs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5550-5521; (G & H) 477-473; (J & K) 456-453.

1918-19 (Mod. CC4)—Tim. Brs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1918-19 (Mod. L) Tim Brs (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720 (J) 539C-552; (K) 6339-6320.

1919-20 (L 3 1/2 Ton)—(CC) Hy, 27988; (GG) Hy, 29097.

1920 (M 2 1/2 Ton)—(A) Tim, 435-4220; (B) Tim, 3191-3120.

DAVIS—1915 (Mod. 38A, B)—(J) 307; (Q) 205; (AA) 211; (BB) 307.

1915 (Mod. 38A, B)—(T) 410; (U) 310.

1915 (Mod. 40, 6-50)—(F) 311; (J) 308 x 1 1/2"; (Q) 205; (AA) 211; (BB) 307 (DD & EE) 306.

1916-17 (Mod. 6-G, 6-E, 6-F)—(F) 310; (Q) 205; (AA) 210; (BB) 307.

1916 (Mod. 6-50)—(F) 311; (J) 407; (Q) 205; (AA) 211; (BB) 307; (DD & EE) 306.

1916 (38C)—(F) Hy, 16691; (G & H) Hy, 26486; (DD & EE) Hy, 17799.

1916 (Mod. 6J, 6H)—(F) Hy, 16692; (G & H) Hy, 26486; (AA) 210; (BB) 307.

1919 (H, I, N, P)—(D) Hy, 16692; (E) Hy, 26486.

1919 (A-9W, Small 6)—(A) Tim, 317-312; (B) Tim, 2687-2620; (D & E) 415T-412A; (G & H) 3598-3520; (J) Tim, 2785-2720; (K) Tim, 3381-3320.

1919 (51)—(A) Tim, 336-3320; (B) Tim, 236-2320; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883.

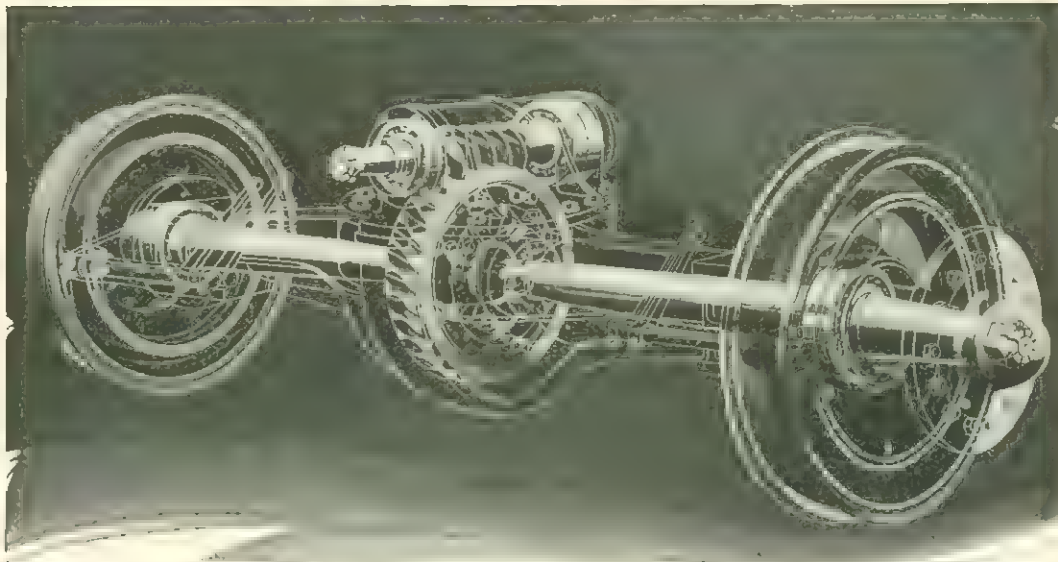
1920 (51)—(A) Tim, 317-312; (B) Tim, 2687-2620; (D) 415T-412A; (G & H) Tim, 359T-3520; (J) 2785-2720; (K) Tim, 3381-3320.

DAY-ELDER—1917-18 (J 1/2 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D & E) Bower 31NDT.

1918 (Mod. A, B & D)—(A) Tim, 435-4320; (B) Tim, 3191-3120; (Bower, 316T; (D & E) U. S. 311 on axles above 8373; No 212 on axles 8002 to 8373; (G & H) Haynes 7060 on axles 8002 to 8173; U. S. 311 on axles above 8173; (J) Bock N417 on axles 8002 to 8768; U. S. 407 used on axles above 8768; (K) Bock N407 on axles 8002 to 8763; U. S. 407 above 8763; (AA) Hy, 17797; (BB) 307; (DD & EE) Hy, 16972; U. S. 5514; (J & K) U. S. 5411; (AA) Hy, 17026; (BB) 308; (DD & EE) Hy, 16506; (FF) Hy, 16920.

1918 (Mod. E)—(A) 312; (B) 311; (D & E) 319 D. R.; (G & H) 219 S. R. or SKF, 918; (J) 410 S. R.; (K) SKF 3110-D; (AA) Tim, 439T; (BB) Tim, 435T; (DD & EE) 415T-412.





## Ball Bearings on Rear Axle Assemblies Maintain Original Settings of Rotating Parts

**S**UBJECTED to the severe and varying strains of road shocks and jars—as well as the heavy thrust loads due to turns, road slants and skidding—the rear axle assembly must be capable of withstanding severe strains without disturbing the accurate relation of rotating parts. The moment wear occurs there is destructive play in the hubs and the gears rub, grind and chatter with disastrous results.

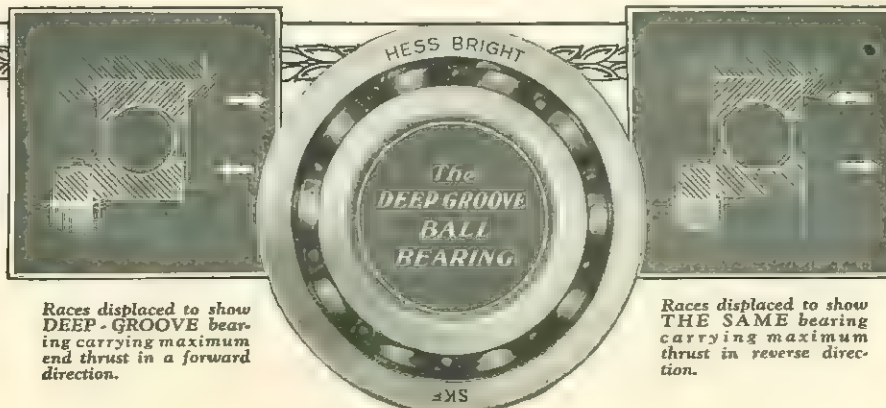
To resist these heavy radial and thrust loads without appreciable wear, is the duty that must be demanded of the bearings in order to maintain the rotating parts in their original settings throughout the life of a car.

As this ability is an inherent quality of deep-groove ball bearings, as made by the Hess-Bright Manufacturing Company, they are considered by many as standard for this purpose.

### THE HESS-BRIGHT MANUFACTURING COMPANY

Supervised by **SKF** INDUSTRIES, INC., 165 Broadway, New York City

799



Races displaced to show DEEP-GROOVE bearing carrying maximum end thrust in a forward direction.

Races displaced to show THE SAME bearing carrying maximum thrust in reverse direction.

**BALL BEARINGS**  
The Highest Expression  
of the Bearing Principle



DEMOT—(J &amp; K) 308; (BB) 208; (DD &amp; EE) 307.

DE MARTIN—1917 (1 & 1½ Ton)—Tim. Brgs.; (AA) 335-3320; (BB) 337-3320; (DD & EE) 316-312.  
1917 (2-3½ Ton)—Tim. Brgs.; (AA) 335-3320; (BB) 337-3320; (DD & EE) 335-3320.DE MARTINI—1920 (1½ Ton)—(AA) Tim, 277-274; (BB) Tim, 339-333.  
1920 (2-2½, 3-3½ Ton)—(AA) Tim, 337-3320; (BB) Tim, 335-3320; (DD & EE) Tim, 316-312.  
1920 (4-4½ Ton)—(AA) Tim, 337-3320; (BB) 335-3320; (DD & EE) Tim, 335-3320.DENBY—(Mod. 12-1 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D) Bower, 4553T; (E) Bower, 3554T.  
(H 2 Ton)—(A) Bower, 310N; (B) Bower, 308N; (D) Bower, 5553; (E) Bower, 4554; (F) Bower, 307; (G) Hy, 1447; (H) 208; (J) 306; (K) 406; (AA) 208; (BB) 307.  
1917-18-19 (Mod. 15 3 Ton)—Tim, 4558-4520; (B) Tim, 3360-3320; (D) Bower, 5553; (E) Bower, 4554; (G & H) Hy, 2476; (J) 307; (K) 407; (AA) 308; (BB) 307; (DD & EE) 305.  
1915-16-17 (1 Ton B & C)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (D) Bower 3672T; (E) Bower, 3622T; (G) Hy, 26084; (H) Hy, 26085.  
1916-17 (2½ Ton K)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) Bower, 5553T; (E) Bower, 4554T; (G) Hy, 26084; (H) Hy, 26085.  
1917 (2 Ton)—(J) 307; (K) 407; (O) 205; (AA) 308; (BB) 307; (DD & EE) 305.  
1917 (12, 1 Ton)—(J) 306; (K) 406; (O) 205; (AA) 208; (BB) 307.  
1917-18-19 (Mod. 13 2 Ton)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (D) Bower, 553; (E) Bower, 4554; (G & H) Hy, 26084-26085; (J & K) 407 & 307; (AA) 308; (BB) 307; (DD & EE) 305.  
(Model 210)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (G & H) Hy, 26480; (J) 310; (K) Hy, 26669; (AA) 211; (BB) Hy, 27988; (DD) 309; (EE) 308.  
1919 (3½-5 Ton)—(F) Hy, 47893; (G & H) Hy, 26480; (K) Hy, 26669.DENBY—1919 (25-3 Ton, 134-2 Ton)—(A) Tim, 4553; (B) Tim, 3360; (J) 307DR; (K) 407; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306.  
1919 (12-1 Ton)—(A) 308DR; (B) 307DR; (J) 306DR; (K) 406; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.  
1919 (27-3½ Ton)—(A) Bk, N312; (B) Bk, N308; (D & E) Hy, 47893 or 47897; (G & H) Hy, 26480; (J) Hy, 26690; (O) 205; (Clutch Housing, Rear) 208; (AA) 212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308.  
1919 (210-5 Ton)—(A) Bk, N313; (B) Bk, N309; (D & E) Hy, 47893 or 47897; (G & H) Hy, 26480; (J) Hy, 26690; (O) 205; (Clutch Housing, Rear) 208; (AA) 212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308.  
1920 (12-1 Ton)—(G) Hy, 26219; (GG) Hy, 29095.  
1920 (134-2, 25-2½ Ton)—(A) Tim, 4550; (B) Tim, 3360T; (G) Hy, 26084; (H) Hy, 26085; (GG) Hy, 29095.  
1920 (27-3½ Ton)—(A) Tim, 4558-4520; (B) Tim, 4365-4320; (D & E) Hy, 47893; (G & H) Hy, 26480; (CC) Hy, 27988; (GG) Hy, 29097.  
1920 (210-5 Ton)—(A) Tim, 5550-5520; (B) Tim, 5351-5320.DENNO—1917-18 (10 1½ Ton)—(D) Bower, 309N; (E) Bower, 306N (Jackshaft), 306N.  
1918 (12 ½ Ton)—(D) Bower, 308N; (E) Bower, 306AL (Jackshaft), 306AL.  
DETROIT (Electric)—1920 (78 to 88)—(A) Tim, 342-3320; (B) Tim, 235-2320; (F) Tim, 458T-454; (G & H) Tim, 377-3720; (J) Tim, 3191-3120; (K) Tim, 439T-432.

DETROIT TRAILER—1920—(A) Tim, 435-4320; (B) Tim, 3191-3120.

DETROITER—1917 (Mod. 6-45)—Tim. Brgs.; (A) 257-2520; (B) 235-2320; (D) 415T-412A; (A) Ann, 209; (G) 288-284; (H) 355-3520; (J) 334-3320; Ann, 207; (K) 258-2520; Ann, 407; (O) Ann, 205; (BB) Ann, 307.

DIAMOND T.—1915 (J 1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3390-3320; (D) 4553-4520; (F) 5550-5521; (G & H) 477-473; (J & K) 458-453; (O) 205; (Q) 209; (AA) Tim, 277-274; (BB) 339-3320; (CC) T-235; (DD & EE) 306-303.  
1919 (J 4-1½ Ton)—(A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-532; (J & K) 539E-532; (O) 205; (Q) 209; (AA) Tim, 277-274; (BB) 339-3320; (CC) T, 235; (DD & EE) 306-303.  
1919 (J 3-2 Ton)—(A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539E-532; (O) 205; (Q) 209; (AA) 337-3320; (BB) Tim, 335-3320; (CC) T-257; (DD & EE) Tim, 316-312.1919 (LB-3½ Ton)—(A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6375E-6320C; (O) 205; (P) 208DR; (Q) 209; (AA) Tim, 419-336 & 412-3320; (BB) Tim, 357-353; (CC) T, 306; (DD & EE) Tim, 339-333.  
1919 (R, S-5 Ton)—(A) 5550-5520; (B) 5351-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J & K) 6375E-6320C; (O) 205; (P) 208DR; (Q) 209; (AA) 439-434; (BB) Tim, 435-434; (CC) T-335; (DD & EE) Tim, 415-412.  
1920 (T, FS-1½ Ton)—(A) 4364-4320; (B) 3161-3120; (F) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (O) 205; (Q) 210; (AA) 209; (BB) 307DR; (DD & EE) 306.1920 (U-2 Ton)—(A) 4558-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-532; (J) 539E-532; (K) 5578E-5521; (O) 205; (Q) 210; (AA) 212; (BB) 309DR; (DD & EE) 308.  
1920 (K-3½ Ton)—(A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375E-6323; (O) 205; (P) 308; (Q) 210; (BB) 311DR.  
1920 (EL-5 Ton)—(A) 5550-5520; (B) 5351-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J) 6375E-6323; (K) 6455E-6422; (O) 205; (P) 308; (Q) 210; (BB) 311DR.  
1920 (S-5 Ton)—(A) 5550-5520; (B) 5351-5320; (D) 780-772; (E) 6552-6521; (G & H) 780-772; (J) 6375E-6323; (K) 6455E-6422; (O) 205; (P) 208DR; (Q) 209; (AA) Tim, 439-434; (BB) Tim, 435-434; (CC) T-335; (DD & EE) 415-412.

DILE—1915 (Mod. A)—(F) 308; (G &amp; H) 207; (J) 0205; (K) 0206; (AA) 206; (BB) 205; (DD &amp; EE) 205.

DIXIE FLYER—1917 (Flyer)—(D & E) Bower, 209AL; (G) Bower, 209A.  
1919 (H) (A) Br, 317T; (B) Br, 235T; (D & E) Br, 208AX; (G & H) Hy, 7141; (I, Q, AA, CC, GG, KK & LL) Spec.; (J) 206; (K) 306DR; (O) 203; (P) 207; (BB) 305.  
1920-21 (H) Br, 317T; (B) Br, 235T; (D & E) Br, 208A; (G & H) Hy, 7141; (I, Q, AA, CC, KK & LL) Spec.; (J) 306; (K) 307DR; (O) 203; (P) 207; (BB) 206DR.

DIXIE—1916-17-18—(G &amp; H) Hy, 26216

DISBROW—1917 (Louis Disbrow)—(DD &amp; EE) Hy, 17799.

DOANE (Truck)—1917 (2½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D) 5550-5520; (E) 5351-5320; (G &amp; H) 3955-3920; (J) 435-4320; (K) 336-3320; (AA) 337-3320; (BB, DD &amp; EE) 335-3320.

1917 (6 Ton)—Tim. Brgs.; (A) 6356-6321; (B) 5355-5320; (D) 6550-6521; (E) 6354-6321; (G & H) 5756-5720; (J & K) 4356-5320; (AA & BB) 440-4320; (DD & EE) 415-412.  
1918 (2½ Ton)—Tim. Brgs. on all Mod.; (A) 4550-4520; (B) 4365-4320; (D) 5550-5520; (E) 5351-5320; (G & H) 3955-3920; (J) 435-4320; (K) 336-3320; (AA) 337-3320; (BB, DD & EE) 335-3320.

1918 (6 Ton)—(A) 6358-6321; (B) 5355-5320; (D) 6550-6521; (E) 6354-6321; (G &amp; H) 5756-5720; (J) 5356-5320.

1920 (2½ Ton)—(A) 4550-4520; (B) 4365-4320; (D) 5550-5520; (E) 5355-5320; (G &amp; H) 3955-3920; (J) 336-332; (K) 435-4320

1920 (3½ Ton)—(A) 5550E-5520; (B) 4351-4320; (D) 6456-6420; (E) 5551E-5520; (G &amp; H) 3955-3920; (J) 336-3320; (K) 435-4320

1920 (6 Ton)—(A) 6356-6320; (B) 5355-5320; (D) 6550-6521; (E) 6354-6321; (G &amp; H) 5756-5720; (J &amp; K) 5356-5320; (HH) Hy, 27095.

DODGE (All Years)—(A) Tim, 256-2530; (B) Tim, 1751-1730; (D &amp; E) Tim, 288-284; (G &amp; H) Tim, 365-363; (J) Tim, 256-2530; (K) Tim, 3191-3120; (O) 304; (Q) 304; (AA) 207; (BB) 308.

1919-20-21—(A) Tim, 256-2530; (B) Tim, 1751-1730; (D) Tim, 288-284; (G &amp; H) Tim, 365-363; (J &amp; K) Tim, 256-2530; (O) Faf, 304A; (S) Faf, 304A.

DORRIS—1915 (1-Ton Del.)—Tim. Brgs.; (A) 337-3320; (B) 315-312; (D &amp; E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4230; (K) 539-532; (AA &amp; BB) 335-3320; (DD &amp; EE) 316-312

1915 (1-A-4)—Tim. Brgs.; (A) 337-3320; (B) 315-312; (D &amp; E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (AA &amp; BB) 335-3320; (DD &amp; EE) 316-312.

1915 (2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320; (G &amp; H) 375-3720; (J) 256-2520; (K) 415-412; (AA &amp; BB) 335-3320; (DD &amp; EE) 316-312.

1916 (1-8-6) 1917 (1-B-6-½ Ton)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (Q) Ann, 1205; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312. (Main Shaft Front on 1916 8-6) uses Tim, 335-3320.  
1916-17 (1-B-W)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (Q) Ann, 1205; (AA & BB) 335-3320; (DD & EE) 316-312. 1917 Model uses Tim, 337-3320 on Main Shaft Front.1919-20-21 (6-80)—Tim. Brgs. from A-K on all models—(A) 412-419; (B) 312-316; (C) 3656-3620; (F) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439 T-432; (O) 205; (P) 211; (BB) 307DR; (CC) Warner X4001; (DD & EE) 206; (GG) Withington 30068.  
1919-20-21 (K-4)—(A) 4558-4520; (B) 3360-3620; (C) 341-3320; (D & E) 5553-5520; (G & H) 5596-552; (J & K) 539D-532; (O) 205; (P) 207DR; (Q) 6813HB; (AA) 211; (BB) 309DR; (CC) Warner X40-11; (DD & EE) 308 (GG) Oakes 500.  
1919-20-21 (K-7)—(A) 4550-4520; (B) 4360-4320; (C) 443B 4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C 552; (K) 6359-6321; (O) 205; (P) 207DR; (Q) 6813 HB; (AA) 211; (BB) 309 DR; (CC) Warner X40-11, (DD & EE) 308; (GG) Oakes 500.

DORT—1915-16-17-18-19 (5-5A, 9, 11)—(D &amp; E) Hy, 16395; (G &amp; H) Hy, 16227; (J) Tim, 319-312; (K) Tim, 348-3320; (AA) 207; (BB) 305

1919 (8, 8C, 11, 11S, 11T)—(D &amp; E) Hy, 16395; (G) Hy, 16227; (H) Nice 280; (J) Tim, 319-312; (K) Tim, 348-3320; (P) Spec.; (AA) 207DR; (BB) 305DR.

1920 (10, 10C, 15, 15S, 39, 39C, 39L)—(A) Tim, 2785-2720; (B) Tim, 1751-1730; (D &amp; E) Hy, 16395; (G) Hy, 16227; (H) Nice 280; (J) Tim, 319-312; (K) Tim, 348-3320; (AA) 207DR; (BB) 305DR.

DOUGLAS—1919-20 (1 Ton)—Tim. Brgs.; (A) 419-412; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412.  
1920 (2 Ton)—Tim. Brgs.; (A) 4554-4520; (B) 3381-3320; (G) 3762-3720; (H) 375-3720; (J) 335-3320; (K) 4368-4320; (CC) Hy, 16820

DREDNOT—1914 (Mod. A-13)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320.

1915 (Mod. 9)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532  
1915 (Mod. G)—Tim. Brgs.; (A) 4558-4520; (B) 4360-4320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532

DREXEL—1917 (Mod. R)—(D &amp; E) Bower, 208A.

1918 (17)—Tim. Brgs.; (A) 3381-3320; (B) 2382-2330; (D) 435T-4320; (G &amp; H) 375T-3720; (J) 255-2530; (K) 417-412.

DUPELEX—1916 (Mod. C-B)—(AA & BB) Tim, 357-353; (DD & EE) 339-333.  
(2 Ton)—(A & D) Bower, 3762T; (B & E) Bower, 3362T; (G & H) Bower, 458T; (J) Bower, 4359T; (K) Bower, 335T.(3 Ton)—(A) 311N; (B) 310N; (J) Bower, 355T; (K) Bower, 4359T.  
1916 (Mod. D)—(A & D) Bower, 311N; (B & E) 310N; (G & H) Bower, 456T; (J) Bower, 335T; Bower 4359T; (O) 205; Jack Shaft Hy, 19200.

1917 (Mod. E)—(A &amp; D) Bower, 311N; (B &amp; E) Bower, 310N; (G &amp; H) Bower, 456T; (J) Bower, 335T; (K) Bower, 4359T; (O) ND, 205 Jackshaft Hy, 19200

1917 (Mod. EL)—(A &amp; D) Bower, 311N; (B &amp; E) Bower, 310N; (G &amp; H) Bower, 456T; (J) Bower, 335T; (K) Bower, 4359T; Intermediate Rear Drive Shaft SK.F, 1309; (O) 205; Jackshaft Hy, 19200.

1918-19 (Mod. E &amp; EL)—(A &amp; D) Bower, 311N; (B &amp; E) Bower, 310N; (G &amp; H) Bower, 456T; (J) Tim, 335-3320; (K) Tim, 4368-4320; (O) 205, Chain Case Brgs. 2 Bowers 4356T, Jackshaft Hy, 19200.

1918 (D 3½ Ton)—(A &amp; D) Bower, 311N; (B &amp; E) Bower, 310N; (G &amp; H) Bower, 456T; (J) Bower, 4359T; (K) Bower, 335T; Jackshaft, Bower, 310NDT.

1919 (EL, EV)—Tim. Brgs.; (J) 333-3320; (K) 4368-4320; (O) 205; (AA &amp; BB) 357-353; (DD &amp; EE) 339-333.

1920 (3½ Ton)—Jackshaft Hy, 19260; (GG) Hy, 29097

DUTY—1920 (2 Ton)—(G) Hy, 26219.

EAGLE—1917-18—(D &amp; E) Hy, 16779; (G &amp; H) Hy, 26056; (AA) Hy, 26518; (BB) Hy, 26737.

ECONOMY—1917 (Mods. 4-36)—(F) 309; (G &amp; H) 0209; (J) 0207; (K) 0307; (Q) 205; (AA) 207; (BB) 305.

1917-18 (Mod. 8-48)—(F) 309; (G &amp; H) 0209; (J) 0306; (K) 406; (Q) 205; (AA) 208; (BB) 307; (DD) 305; (EE) 306.

(K)—1920—(A) Br, 336TXL; (B) Br, 236TX; (D) 310DR; (G &amp; H) Tim, 366-363; (J) 307DR; (K) Hy, 57883.

ELCAR—1915 (Mod. 6-40)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 277-274; (BB) 339-333.

1916 (Mod. 6-40)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G &amp; H) 375T-3720; (J) 255-2530; (K) 417-412; (AA &amp; BB) 335-3320; (DD &amp; EE) 316-312.

1916 (Mod. A-B)—(D &amp; E) Hy, 16076; (G &amp; H) Hy, 26216.

1917-18—(G &amp; H) Hy, 26216.

1919—(A) Tim, 317-312; (B) Tim, 235-233; (D &amp; E) Tim, 277-274; (G &amp; H) Hy, 26216; (J) Tim, 344-3320; (K) Tim, 416-413.

1919—(F) 310DR; (J) 307DR; (O) 205.

1920 (D, H, G &amp; K)—(A) Br, 336TXL; (B) Br, 236TX; (F) 310DR; (G &amp; H) Tim, 366-363; (J) 307DR; (K) Hy, 57883; (O) 205; (AA) 208; (BB) 307; (DD &amp; EE) 305.

1920 (D-4, 6)—(F) 310DR; (J) 307DR; (K) 407; (O) 205; (AA) 208; (BB) 307; (DD &amp; EE) 305.

ELGIN—1916-17 (Farm Tractor)—(D) Tim, 4554-4520; (E) Tim, 3362-3320.

1916 (Pleas.)—(D &amp; E) 309; (F) 309; (G &amp; H) 209; (J) Tim, 225; (K) 307; (use 306 and 406 with short third member); (O) 203; (AA) 207; (BB) 306.

1917 (Pleas.)—(F) Bower, 309ADT; (G &amp; H) Bower, 209AL; (J) 0208; (K) 0407.

1917 (Pleas.)—(F) 309; (G &amp; H) 0209; (K) 306; (AA) 207; (BB) 306.

1918 (Mod. A)—(D &amp; E) 309; (G &amp; H) 209; (J) 306; (K) 406; (AA) 207; (BB) 306.

1917—(A) 2083; (B) 2128; (D &amp; E) Br, 208AX; (G &amp; H) Hy, 26216; (J) 208; (K) 406.

1919—(A) Tim, 335; (B) Tim, 235; (F) Shats 309; (G &amp; H) Gur. 209; (J) 306; (K) 406; (O) 205; (AA) 207; (BB) 306; (GG) Spec.

1919-20 (K)—(A) Bk,







## GENERAL MOTORS—Continued

1915-16 (Mod. 30-40)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5550-5520; (E) 5355-5320; (J) Ann, 308; (K) Ann, 408; (AA & BB) 357-353; (DD & EE) 339-333.

1915-16 (Mod. 31-41)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (C) Tim, 341B-3320; (D & E) Tim, 5553-5520; (G & H) Tim, 559C-552; (J & K) SKF, 207A, or Tim, 539C-532; (O) 205; (P) 305; (Q) SKF, 910; (AA & BB) Tim, 357-353 ND 308; (DD & EE) Tim, 339-333 ND 306.

1915-16 (Mod. 70)—(A) Tim, 4558-4520; (B) Tim, 4361-4320; (C) Tim, 443B-4320; (D) Tim, 6356-6321; (E) Tim, 5355-5320; (J) 308; (K) 409; (AA) Tim, 439-4320; (BB) Tim, 435-4320; (DD & EE) Tim, 415-412; Jackshaft, 410.

1915-16 (Mod. 100)—(D) Tim, 6550-6521; (E) Tim, 6354-6321; (J) 308; (K) 400; (AA) Tim, 439-4320; (BB) Tim, 435-4320; (DD & EE) Tim, 415-412; Jackshaft, 410.

1916 (Mod. 26)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.

1916 (Mod. 71)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1916 (Mod. 101)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1917 (Mod. 15)—(J) 309; (K) 407; (BB) 308.

1917 (Mod. 16)—(G & H) Hy, 10571; (J) 305; (K) 408; (O) 205; (P) 305; (Q) SKF, 910; (AA) 305; (BB) 308; (DD & EE) 306.

1917 (31 1/2 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 5553-5520; (G & H) 559C-552; (J & K) 639C-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.

1917 (71 3/4 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (O) Ann, 1205; (P) Ann, 208; (Q) Ann, 206 SKF, 910; (AA) DR, 307; (BB) ND, 1310; (DD & EE) 415-412 DR, 308.

1918 (21-31 1/2 Ton)—(O) 205; (AA & BB) 308; (DD & EE) 306.

1918 (Mod. 16)—(F) 312; (J) 309; (K) 406; (O) 205; (AA & BB) 308; (DD & EE) 306.

1918 (Mod. 71)—(O) 205; (Q) 208; (AA) 307; (BB) 310; (DD & EE) 308.

1917 (21 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (AA) 277-274; (BB) 339-333.

1917 (L 3 1/2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 337-3720; (BB, DD & EE) 335-3320.

1917 (41 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-5520; (J & K) 539C-532; (AA) ND, 305; (BB) ND, 308; (DD & EE) 339-333.

1917 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6550-6521; (E) 6354-6321; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1918—Tim. Brgs. from A-K on all models (31-1 Ton)—(A) 3750-3720; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (O) 205; (AA & BB) 308; (DD & EE) 306.

1918 (1 1/2 Ton)—(A) 4558-4520; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453.

1918 (40-41R-2 Ton)—(A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1918 (71-3 1/2 Ton)—(A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (O) 205; (Q) 208DR; (AA) 309; (BB) 310; (DD & EE) 308.

1918 (101-5 Ton)—(A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA) Tim, 439-4320; (BB) Tim, 435-4320; (DD & EE) Tim, 415-412.

1919-20 (16)—(F) 312; (G & H) Hy, 10571; (I) WM, 1271-S; (J) 309DR; (K) 406; (O) 205; (Q) SKF, 910; (AA & BB) 308; (CC) 305DR; (DD & EE) 306; (GG) Oakes C-1161-1124; C-1507-1506; (KK) 5792.

1919-20—Tim. Brgs. from A-M on all models (31-41)—(A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (L & M) 539D-532; (N) SKF, 207A; (O) 205; (Q) SKF, 910; (AA & BB) 308; (CC) 305DR; (DD & EE) 306; (GG) Oakes C-1161-1124; C-1507-1506.

1919-20 (71)—(A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (I) 539C-532; (M) 6359-6320; (N) SKF, 1308A; (O) 205; (P) 208DR; (Q) SKF, 910; (AA) 309; (BB) 310; (CC) 307DR; (DD & EE) 308; (GG) Oakes C-2802-2785; C-2788-2786.

1919-20 (101)—(A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D, G & H) 780-772; (E) 6552-6521; (L & M) 6359-6320; (N) SKF, 1308A; (O) 205; (P) 208DR; (Q) SKF, 910; (AA) 309; (BB) 310; (CC) 307DR; (DD & EE) 308; (GG) Oakes C-2802-2785; C-2788-2786.

GERONIMO—1917-18 (Six A-45)—(D & E) Hy, 16691; (G & H) Hy, 26227.

1919-20 (6-A-45)—(D & E) Hy, 16691; (G & H) Hy, 26227; (CC) Hy, 16950-16820.

CERSIX—1919-20 (M)—(A) Bk, 310; (B) Bk, 308; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR; (N) 310; (O) 205; (P) 211DR; (AA) Spec.; (BB) 307DR; (DD & EE) 306; (GG) Hy, 29097.

1919 (K)—(C) Spec.; (F) 413; (G & H) 213DR; (I) SKF, 912; (J) 308; (K) 408; (M) SKF, 1718; (N) 310; (O) 205; (P) 211DR, (AA) Spec.; (BB) 307DR; (DD & EE) 306; (GG) Hy, 29097.

1920 (K)—(A) Bk, 310; (B) Bk, 303; (C) Spec.; (D) Tim, 6553-6521; (E) 6453-6420; (G & H) 213; (I) SKF, 912; (J) 308; (K) 408; (M) SKF, 1716; (N) 310; (O) 205; (P) 211DR; (AA) Spec.; (BB) 307DR; (DD & EE) 306; (GG) Hy, 29097.

1920 (L)—(A) Bk, 312; (B) Bk, 311; (C) Spec.; (G & H) 210DR; (J) 409; (K) 413DR; (O) 205; (P) 308DR; (AA) 210DR; (BB) 310DR; (DD) 307; (EE) 308; (GG) Hy, 29097.

GHENT—1918 (6-60)—(D & E) Hy, 16779; (G & H) Hy, 26056.

GIANT—1919 (15-1 Ton)—(CC) Hy, 16820; (DD & EE) Hy, 17799.

1919 (17-3 1/2 Ton)—(CC) Hy, 27988.

1919-20 (15-1 Ton)—(A) 308DR; (B) 307DR; (F) 311DR; (G & H) 215DR; (J) 407; (K) 410DR; (O) 205; (DD & EE) 306.

1919-20 (16-2 Ton)—(A) 310DR; (B) 308DR; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR; (O) 205.

1919-20 (17-3 1/2 Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 410; (O) 205.

GLIDE—1915 (Mod. 30)—(F) 310; (G & H) 0211; (J) 306; (K) 406; (O) 205; (Q) 205; (AA) 308; (BB) 307; (CC) 303 with Cone Clutch, No. 0204 with Plate Clutch; (DD & EE) 305.

1916 (Lt. 6-40)—(D & E) 310; (G & H) 0210; (J) 306; (K) 406; (O) 205; (Q) 205; (AA) 308; (BB) 307; (DD & EE) 305.

1917 (6-40)—(F) 310; (G & H) 0201; (J) 306; (K) 406; (Q) 205; (BB) 308.

GLOBE—1916 (1/2 Ton)—(G) Hy, 26219.

1916-12-1 1/2 Ton)—(G) Hy, 26084; (H) Hy, 26085.

1916-17-18 (1 Ton)—(F) Hy, 16670; (G & H) Hy, 26069.

1917 (2 Ton), 1918 (C & CC 2 Ton)—(F) Hy, 26662; (G & H) Hy, 26356.

1918 (C & CC 2 Ton)—(F) Hy, 26662; (G & H) Hy, 26388.

1917-18 (1 1/2-2 Ton)—(AA) Hy, 17026; (BB) Hy, 16684; (DD & EE) Hy, 16506; (FF) Hy, 16820.

1919 (A-1, 1 Ton)—Hy. Brgs.; (D & E) 16670; (G & H) 26069; (J & K) 26668; (AA) 17026; (CC & FF) 16820; (DD & EE) 16506; (GG) 29097.

GOLDEN WEST—1918 (Truck)—(AA) Tim, 419-412; (BB) 357-353; (DD & EE) 339-333.

1919 (4)—Tim. Brgs.; (A & D) 759-752; (B & E) 5752-5720; (G & H) 598-592; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412; (Prop. Shaft, Front and Rear) 463-4520.

1920 (H)—(A & D) 759-752; (B & E) 5752-5720; (G & H) 5757-5720; (Third Differential Main Bearings) 598-592; (Outer) 463-4520; (J) 559-552; (K) 6375E-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

GRAHAM—1920 (A-1 1/2 Ton)—Tim. Brgs.; (A) 419-412; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G & H) 335-3520; (J) 335-3320; (K) 417-412; (GG) Hy, 29097.

GRAMM—1915-16 (Mod. 66)—Tim. Brgs.; (A) 4367-4320; (B) 3159-3120; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539-532.

1915 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6550-6521; (E) 6354-6321.

GRAMM-BERNSTEIN—1915 (1 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320.

1915 (3 1/2 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6356-6321; (E) 5355-5320.

1915 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6550-6521; (E) 6354-6321.

1919 (1 1/2 Ton, Bevel or M. & S. Diff.)—(F) Hy, 16670; (G & H) Hy, 26069-26064; (K) Hy, 26668.

1920-21 (15)—(A) Bk, 435; (B) Bk, 316; (D) Hy, 16670; (E) 307DR; (G & H) Hy, 16069; (I, O, FF, GG, KK & LL) Spec.; (J) 307DR; (K) Hy, 26668; (N) 309; (O) 205; (S, AA, BB) 307; (CC & DD) 305; (EE) 306.

1920-21 (20)—(A) Bk, 435; (B) Bk, 316; (F) 312DR; (G & H) 216; (J) 407; (K) 410DR; (O) 205; (P) 208; (Q, FF, KK & LL) Spec.; (AA) 209 and 310; (BB) 309DR; (CC) 306; (DD) 208; (EE) 309.

1920-21 (25)—(A) Bk, 4553; (B) Bk, 3360; (D & E) Bk, N215; (G & H) Bk, N217; (J & K) Bk, 537; (O) 205; (P) 308RT; (Q) 210RT; (AA) 209 and 310; (BB) 309DR; (CC) 306; (DD) 208; (EE) 309; (FF, KK & LL) Spec.

1920-21 (35)—(A) Bk, N312; (B) Bk, N308; (C, FF, KK & LL) Spec.; (D, E, G & H) Bk, 598; (I) Bk, 312; (O) 205; (P) 308RT; (Q) 210RT; (AA) 209 and 311; (BB) 311DR; (CC) 406; (DD) 309; (EE) 409.

1920-21 (50)—(A) Bk, N313; (B) Bk, N309; (C, FF, KK & LL) Spec.; (D, E, G & H) Bk, 779; (J & K) Bk, 6360-6323; (O) 205; (P) 308RT; (Q) 210RT; (AA) 209 and 311; (BB) 311DR; (CC) 408; (DD) 309; (EE) 409.

1920-21 (65)—(A) Bk, 435; (B) Bk, 316; (D & E) Bk, N212; (G & H) Bk, N215; (J & K) Bk, 539; (O) 205; (P) 208; (Q, FF, GG, KK & LL) Spec.; (AA) 209 and 309; (BB) 309DR; (CC) 306; (DD) 209; (EE) 309.

GRANT—1915 (Mod. M)—(A) 0305; (B) 0304; (AA) Hy, 17016; (BB) 0305.

1915-16 (Mod. T & V)—(D & E) 208; (J) 206; (K) 308; (O) 204; (AA) 208; (BB) 306.

1916-17-18—(D & E)—Bower, 208A; (G & H) Hy, 26216.

1917 (Mod. K)—(D & E) 208; (J) 206; (K) 308; (O) 204; (Q) 204; (AA) 208; (BB) 306.

1917 (Mod. Six G)—(A) Tim, 317-312; (B) Tim, 235-2330; (D & E) 208AX; (G & H) Hy, 26216; (J) SR, 306; (K) DR, 307; (AA) 209; (BB) 306.

1918 (3 1/2 Ton)—(D) Tim, 420-413; (E) Tim, 319-313; (CC) Hy, 16950; (GG) Hy, 19107.

1918 (1 1/2 Ton)—(D) Tim, 4559-4520; (E) Tim, 3190-3120; (G & H) Tim, 355-3520; (J) Tim, 335-3320; (K) Tim, 417-412; (O) 205; (AA) 308; (BB) 307; (CC) Hy, 16950; (DD) 305; (EE) 306; (GG) Hy, 19107.

1918 (2 Ton)—(G) Tim, 375-3720; (H) Tim, 3762-3720; (J) Tim, 335-3320; (K) Tim, 4368-4320; (N) Hy, 16950; (GG) Hy, 19107.

1919 (3 1/2 Ton)—(O) 205; (AA) 207DR; (BB) 305DR.

1919 (1 1/2 Ton)—(D) Tim, 4559-4520; (E) Tim, 3190-3120; (G & H) Tim, 355-3520; (J) Tim, 335-3320; (K) Tim, 417-412; (O) 205; (AA) 308; (BB) 307; (CC) Hy, 16950; (DD) 305; (EE) 306; (FF) Hy, 16820; (GG) Hy, 29097.

1919 (15-16, 2 Ton)—(O) 205; (AA) 308; (BB) 307; (DD) 305; (EE) 306.

1920 (H)—(A) Bk, 317; (B) Bk, 235; (F) 309; (G & H) Bk, 355; (J) Bk, 257; (K) Bk, 334; (P) 209; (Q, GG) Spec.

1920 (24-3 1/2 Ton)—(GG) Hy, 29097; (Auxiliary Shaft, Front and Rear) Hy, 16005.

GRAY (Tractor)—1919—(A & B) Tim, 385-383; (AA) 2-Hy, 17068 & 1-Hy, 17064; (BB) 2-Hy, 17182 & 2-Hy, 17132; (DD & EE) Hy, 17068; (GG) 2 No. 205; (KK) 2 No. 205; (LL) 205.

GREAT EAGLE—1914-15 (10 Pass.)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B, 3620; (D & E) 375-3720; (G) 456-4520; (H) 559-552; (J & K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (Great Eagle)—Tim. Brgs.; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257.

GREAT WESTERN—1915-16 (6-40)—(D & E) Hy, 16770; (G & H) Hy, 26252.

GRINNELL (Electric)—1916—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

H. C. S.—1920-21—(A) 418; (B) 257; (G & H) Bk, N211S; (CC) Hy, 10820; (DD & EE) Hy, 17779.

HACKETT—1917-18—(D & E) Hy, 16018; (G & H) Hy, 26063; (BB) 207; (CC) 305.

HAHN—1915-16-17 (C 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720 (1916 Mod. C) uses Tim. 456C-454 on L. H. Differential; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

1915-16-17 (Mod. E-D 1 1/2-2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-532; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (Mod. F)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 337-3320; (BB, DD & EE) 335-3320.

1917 (Mod. F 3 1/2-Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA & BB) 440-4320; (DD & EE) 415-412.

1918 (3 1/2 Ton)—(D) Bower, 308N; (E) 306AL; (Jackshaft) 306AL; (AA) Hy, 27797; (DD & EE) Hy, 26972; (FF) Hy, 26956.

1919—Tim. Brgs. on all models (1 Ton)—(A) 419-412; (B & E) 3191-3120; (D) 4559-4520; (G & H) 355-3520; (J) 335-3320; (K) 417-412.

1919 (2 Ton)—(A) 4554-4520; (B) 3381-3320; (G) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4368-4320.

1920 (1 Ton)—(A) 419-412; (B) 3191-3120.

1920 (D)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-552; (I) 539E-532; (K) 5578E-5521; (AA & BB) 357-353; (DD & EE) 339-333.

1920 (E)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 5578E-5521; (AA) 337-3320; (BB, DD & EE) 335-3320.

1920 (F)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6359-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1920 (G)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 6378-6320; (G & H) 477-473; (I) 456-453; (K) 539E-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

1920 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

HAL—1916-17 (Mod. 21)—(O) 205; (AA) 210; (BB) 307; (CC) 210; (DD) 305; (EE) 306; (DD) Hy, 16497; (EE) Hy, 16497.

1917—(O) 205; (AA) 210; (BB) 307; (DD) 206; (EE) 306.

1918 (All Mod.)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

HALL—1916 (3 1/2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA & BB) 357-353; (DD & EE) 339-333.

1916 (3 1/2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (3 1/2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6356-6321; (E) 5355-5320; (G) 375-3720; (H) 395-3920; (J) 336-3320; (K) 435-4320; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) 6550-6521; (E) 6354-6321; (G) 375-3720; (H) 395-3920; (J) 336-3320; (K) 456-4520; (AA & BB) 357-353; (DD & EE) 339-333.

1917-18 (2 Ton)—(AA) Hy, 17026; (BB) Hy, 16684; (DD & EE) Hy, 16506; (FF) Hy, 16820.</



## HALL—Continued

1920 (2 Ton)—(GG) Hy, 29097.  
 1920 (3½ Ton)—Tim. Brgs.; (A) 4550-5520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6357E-6320; (AA) 419-412; (BB) 357-353; (DD & EE) 339-333; (CC) Hy, 29097.  
 1920 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D, G & H) 780-772; (E) 6552-6521; (E) 6552-6521; (J) 6375E-6323; (K) 6455E-6422; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412; (GG) Hy, 29097.

## HALLIDAY—1919-20 (CC) Hy, 16950.

HAMLIN-HOLMES—1921—(C) (Outer Race) Hy, 33015; (Inner Race Roller) Hy, 02073; (C) 209; (D) Hy, 18295; (E) 305DR; (G) 0210R; (H) 0310R; (O) 202; (AA) 209; (BB) 307DR.

HANDLEY-KNIGHT—1921 (Mod. A) Tim. Brgs. from A-K (A) 415-412A; (B) 2382-2330; (C) 3556B-3620; (D) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (O) 205; (Q, R, KK & LL) Spec.; (AA) 308; (BB) 307; (DD) 305; (EE) 306.

HANSON SIX—1920-21 (54.60)—Tim. Brgs. from A-K—(A) 317-312; (B) 2687-2620; (D) 415T-412A; (G & H) 359S-3520; (J) 2785-2720; (K) 3381-3320; (O & CC) 205; (S) 308; (DD & EE) 305.

HARVARD—1916—(D & E) Hy, 16076; (G & H) Hy, 16076.

1917 (4-20)—(D & E) Hy, 16076; (G & H) Hy, 26269.

HARROUN—1917—(A) Tim, 276-2720; (B) Tim, 1751-1730; (F) 309; (G & H) Tim, 288-284; Ann, 0209; (J) Tim, 276-2720; (K) Tim, 3191-3120; Ann, 406; (AA) 207; (BB) 306.  
 1920 (AA-2)—(O) 205; (A) 207DR; (BB) 305DR.

HARVEY—1917 (W-K 3 Ton, H 3½ Ton)—(D & E) Bower, 317NDT; Tim. Brgs.; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.  
 1917-18 (WKA 5 Ton)—(D & E) Bower, 319NDT.

1918 (2 Ton)—Tim. Brgs.; (A) 419-412; (BB) 357-353; (DD & EE) 339-333.

1918 (WFA 2½ Ton)—Tim. Brgs.; (AA) 419-412; (BB) 336-3320; (DD & EE) 339-3320.

1918 (WK 3, 3½ Ton)—(AA) 439-4320; (BB) Tim, 435-4320; (DD & EE) Tim, 415-412.

1920 (W-E-A 1½ Ton)—(A) 310DR; (B) 308DR; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR; (O) 205; (AA & BB) 307; (DD) 305; (EE) 306.

1920 (W-F-A 2½ Ton)—(A) 310DR; (B) 309DR; (F) 314DR; (G & H) 217DR; (J & K) 408; (O) 205.

1920 (W-H-A 3½ Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 410; (O) 205.

HASSLER—1917 (Mod. C)—Right Hand Wheel End, Hy, 16080; Left Hand, 16079; (G) Hy, 16080; (H) Hy, 16079.

HATFIELD—1917 (Mod. 6)—(D & E) Bower, 208A.

HAWKEYE—1918 (L-2 Ton)—(F) Hy, 26662; (G & H) Hy, 26388; (K) Hy, 26777.

1917-18—(H & J-1½ Ton)—(D & E) Bower, 308NDT; (F) Hy, 16670; (G & H) Hy, 26069; (K) Hy, 26668.  
 1919-20 (K)—(A) Br, 206; (B) Br, 207; (D) Hy, 16670; (E, J, AA & BB) 307; (G & H) Hy, 26069; (I) 234; (K) Hy, 26668; (N) 308; (O) 205; (Q) 212; (CC) 304; (DD & EE) 306.

1919-20 (M)—(A) Br, 91; (B) Br, 581; (D) Hy, 26662; (E, N) 306; (G & H) Hy, 26057; (I) 53; (J) 307; (K) 26777; (O) 205; (Q) 212.

HAYNES—1916-17 (6 & 12)—(A) 308; (B) 305; (F) 311; (G & H) 210 WRT; (J) 305; (K) 307; (Q) 205; (AA) 209; (BB) 307; (DD) 305; (EE) 306.

1917 (Light C)—(A) 0307; (B) 0306; (F) 309; (G & H) 0209; (J) 0307; (K) 0308; (AA) 208; (BB) 300.

1918-19—(A) Gur, 308D PRT; (B) 305RT; (F) 211R; (G & H) 210W RT; (J) 305; (K) 307.  
 1919-20-21 (45, 46, 47, 48)—(A) 308DR; (B) 305RT; (F) 211DR; (G & H) 210; (I) 1510; (J) 307DR; (K) 305DR; (Q) 209 Spec.; (R) Spec.; (AA) 209; (BB) 307DR; (CC) Hy, 16953; (DD & EE) 306.

HEBB—1918-20 (Lincoln 1½ Ton)—(A) Tim, 435-4320; (B) Tim, 3191-3120.

1918-20 (Washington 2½ Ton)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (AA) Tim, 419-412; (BB) Tim, 357-353; (DD & EE) Tim, 339-333.

HENDERSON BROS.—1916 (Mod. C-2)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D) 435T-4320; (G & H) 375T-3720; (J & K) 4365-4320; (AA) 277-274; (BB) 339-333.  
 1916 (Mod. D)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 462-4520; (E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 277-274; (BB) 339-333.

HENDERICKSON—1915-16-17 (D-1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4558-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.

1915-16 (1½, 2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1917 (3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552.

1918—Tim. Brgs. from A-K on all models (D-1 Ton)—(A) 4558-4520; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (GG) Hy, 29097.

1918 (E-2 Ton)—(A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (GG) Hy, 29097.

1918 (F-3½ Ton)—(A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (GG) Hy, 29097.

1920 (K-2 Ton)—(A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (GG) Hy, 29097.

1920 (J-4 Ton)—(A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6359-6320.

1920 (K-5 Ton)—(A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (GG) Hy, 29097.

HERFF BROOKS—1915—(A) Bower, 357T; (B) Bower, 315T; (G & H) Hy, 26216; (DD & EE) Hy, 17799.

HIGRADE—1919 (A-17-¾ Ton)—(GG) Hy, 29097.

1920 (A-18, 1 Ton, B-20, 1½ Ton)—(GG) Hy, 29095.

HOLLIER—1916 (F) 810; (G & H) 0310; Hy, 26226; (J) 0208; (K) 0308; (AA) 208; (DD) 206.

HOLMES—1919 (A) Tim, 415-412A; (B) Tim, 2382-2330; (F) Tim, 458T-454; (G & H) Tim, 375T-3720; (J) Tim, 317-312; (K) Tim, 439T-432; (O) 205; (Q) 209; (AA) Tim, 277-274; (BB) Tim, 339-333; (DD & EE) 306; (CC) 235.

1915 (Mod. 45)—(J) 0307; (K) 0407; (O) 0208; (AA) 1212; (BB) 307; (DD & EE) 1306.  
 1916 (Mod. 34)—(D & E) Hy, 16779; (G & H) Hy, 26056; (J) 0207; (K) 0307; (O) 0305; (BB) 307.

1916 (Mod. 68)—(A) 1308; (B) 1305; (D) 1310; (E) 1210; (J) 0207; (K) 0407; (O) 0305; (AA) 307.

1914 (Olympic 40)—(D & E) Hy, 16032 & 16792; (G & H) Hy, 26056; (J) ND 0207; (K) ND 0407.

1916 (348)—(A) Bower, 308AL; (B) Bower, 305AL; (D & E) Hy, 16779; (G & H) Hy, 26056.  
 1917 (3-49)—(D & E) Hy, 16779; (G & H) Hy, 26056; (J) 0208; (K) 0407; (O) 205; (E) 307 (Mod. 30)—(T) 308; (U) 309; (AA) 307; (BB) 305; (CC) 306.

(Mod. 32)—(J) 205; (K) 305; (AA) 210; (BB) 307.  
 (Mod. 50, 51 & 52)—(AA) 308; (BB) 307.

1918 (all)—(D & E) Hy, 16779; (G & H) Hy, 26056; (AA) Hy, 27797; (BB) Hy, 27899; (DD & EE) Hy, 26972; (FF) Hy, 26956.

1920 (All Mod.)—Tim. Brgs.; (A) 415-412A; (B) 2382-2330; (C) 3656B-3620; (D) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (AA) B27-27; (B339-333).

HORNER—1913-14-15-16 (1 Ton)—Tim. Brgs.; (A & D) 3750-3720; (B & E) 3350-3320 (G & H) 3762-3720; (J & K) 3362-3320; (AA) 357-353; (BB) 419-412; (DD & EE) 339-333.

1916 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321; (G) 395-3920; (H) 5552-5520; (J) 3762-3720; (K) 4554-4520.

1917 (Mod. A)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 365-363.  
 1917 (1 Ton)—Tim. Brgs.; (A & D) 3750-3720; (B & E) 3350-3320; (G & H) 3762-3720; (J & K) 3362-3320; (AA) 337-3329; (BB, DD & EE) 335-3320.

1917 (3 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA & BB) 337-3320; (DD & EE) 335-3320.

1917 (1½ & 2 Ton)—Tim. Brgs.; (A & D) 4550-4520; (B & E) 4361-4320; (G & H) 3762-3720; (J & K) 3362-3320; (AA & BB) 337-3320; (DD & EE) 335-3320.

1917 (3 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 5351-5320; (G) 395-3920; (H) 5552-5520; (J) 3762-3720; (K) 4554-4520; (AA & BB) 337-3320; (DD & EE) 335-3320.

1917 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321; (G) 5552-5520; (H) 395-3920; (J) 4554-4520; (K) 454-4520; (AA) 439-4320; (BB) 335-3320; (DD & EE) 415-412.

1917 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA & BB) 439-4320; (DD & EE) 415-412.

1917 (G 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3350-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1917 (G 1½, 2-Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA & BB) 337-3320; (DD & EE) 335-3320.

HOWARD—(Mod. 6)—(O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

HOWARD CO., A.—1917—(K) 307; (Q) 205; (AA & BB) 307; (CC) 304; (DD & EE) 305.

HUDSON—1915 (54.6-Cyl.)—Tim. Brgs.; (A) 418-412; (B) 316-312; (C) 3657B-3620; (D & E) 375-3720; (G) 375T-3720; (H) 455-453; (J) 375-3720; (K) 4367-4320; (AA) Ann, 211; (BB) Ann, 308; (DD & EE) 306.

1955-16 (G-6-40)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D) 439T-4320; (E) 375-3720; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) Bower, 210; Hy, 17026; (BB) Bower, 307; Hy, 16684; (DD) Hy, 16506; (EE) Bower, N305; Hy, 16506; (FF) Hy, 16820.

1917 (Super 6-H)—(A) Tim, 337-3320 or 3381-3320; (B) Tim, 236-2330 or 2883-2330; (D) Tim, 435T-4320; (G & H) Tim, 375T-3720; (J) Tim, 255-2530; (K) Tim, 417-412; (AA) Hy, 17026; (BB) Hy, 16684; (DD) Hy, 16506; (EE) Hy, 16506; (FF) Hy, 16820.

1918 (Super 6-J & 4-J)—(A) Tim, 415-412; (B) Tim, 2382-2330; (D & E) Tim, 485T-4320; (G & H) Tim, 375T-3720; (J) Tim, 255-2530; (K) Tim, 417-412; (AA) Hy, 17026; (BB) Hy, 16684; (DD) Hy, 16506; (EE) Hy, 16506; (FF) Hy, 16820.

1919—Tim. Brgs. from A-K; (A) 415-412A; (B) 2382-2330; (D) 458T-454; (G & H) 375T; (J) 317-312; (K) 439T-432; (AA) Hy, 17026; (BB) Hy, 16684; (CC, FF) Hy, 16820; (DD & EE) Hy, 16506; (Generator) Hy, 620002.

1920—Tim. Brgs. from A-K; (A) 415-412A; (B) 315-312; (D) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (AA) Hy, 47026; (BB) Hy, 46684; (CC & FF) Hy, 16820; (DD & EE) Hy, 16506; (Generator) Hy, 620002.

HUFFMAN—1918 (2 Ton)—Tim. Brgs. from A-K; (A) 435-4320; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G) 375-3720; (H) 3762-3720; (J) 333-3320; (K) 4368-4320.

1920-21 (B, C-1½ Ton)—Tim. Brgs. from A-K; (A) 435-4320; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G) 375-3720; (H) 3762-3720; (J) 333-3320; (K) 4368-4320; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1920-21 (6)—(A) Br, 366TXL; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57583.

HUPMOBILE—1915 ("H T")—(G & H) Hy, 26991; (BB) Hy, 16995; (DD) Hy, 16993; (EE) Hy, 16994.

1916-17 (Mod. N)—(A) Tim, 277-274; (B) Tim, 237-233; (F) 310; (G & H) 0210; (J) 1306; (K) 1406; (AA) 0211 (on wire wheels use Tim, 318-314 on Front Axle); (DD) Hy, 16993; (EE) Hy, 16994.

(Mod. H-HA)—(AA) 305; (DD & EE) Hy, 16993 & 16994; (G) ND 03.  
 (Mod. N-K)—(A) 305; (B) 208; (F) Mod K210D Mod N310RT; (G & H) 210WS; (J) 306D; (K) 406RT; (Q) 213HS; (AA & BB) 213; (DD) Hy, 16993; (EE) Hy, 16994.

1917 (F) 0303; (G & H) 0215; (K) 407; (DD) Hy, 16993; (EE) Hy, 16994.

1918-19 (Mod. R)—(D & E) Hy, 16691; (G & H) Hy, 26401; (J) 316; (K) 334.

1920—(D & E) Hy, 46619; (G & H) Hy, 26401; (J) 316; (K) 334; (DD & EE) Hy, 26972.

HURLBURT—1917 (1½ Ton)—Tim. Brgs.; (AA) 337-3330; (BB) 335-3320; (DD & EE) 316-312.

1917 (2, 3½ X 5 Ton)—Tim. Brgs.; (AA) 439-4320; (BB) 440-4320; (DD & EE) 415-412.

1917 (W. F. 2, 7-Ton)—Tim. Brgs.; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

1920 (2, 5-Ton)—(GG) Hy, 29097.

IMPERIAL—1915 (Mod. 34)—(D & E) Hy, 16792; (G & H) Hy, 26056; (J) 0207; (K) 307; (AA) 208; (BB) 207; (DD & EE) 305.

1916 (All)—(D & E) Hy, 16779; (G & H) Hy, 26252.

INDEPENDENT—1919 (F-1 Ton)—(A) Tim, 435-4320; (B) Tim, 3191-3120; (J) 307DR; (K) 407; (O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.

1919 (E-1½ Ton)—(J) 306DR; (K) 406; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1919 (A-2 Ton)—(A) Tim, 3762-3720; (B) Tim, 3360-3320;



## INDIANA—Continued

1919 (20-2 Ton)—(A) 310DR; (B) 309DR; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR;  
(O) 205; (Clutch Housing, Rear) 308.  
1919-20-21 (35-3 1/2 Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 410;  
(O) 205; (Clutch Housing, Rear) 308.  
1919 (50-5 Ton)—(A) 312DR; (B) 311DR; (F) 319DR; (G & H) 219DR; (J) 409; (K) 410;  
(O) 205; (Clutch Housing, Rear) 308.  
1920-21 (12-1 1/2 Ton)—(A) Bk, N308DR; (B) Bk, N307DR; (F) 311DR; (G & H) 215DR;  
(J) 407; (K) 410DR; (O) 205; (Clutch Housing, Rear) 308; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.  
1920-21 (20-2 Ton)—(A) Bk, N310DR; (B) Bk, N308DR; (F) 312DR; (G & H) 216DR;  
(J) 407; (K) 410DR; (O) 205; (Clutch Housing, Rear) 308.  
1920-21 (25-2 1/2 Ton)—(A) Bk, N310DR; (B) Bk, N308DR; (F) 314DR; (G & H) 217DR;  
(O) 205; (Clutch Housing, Rear) 308.  
1920-21 (50-5 Ton)—(A) Bk, 312DR; (B) Bk, 311DR; (G & H) 219; (J) 409; (K) 410; (O) 205; (Clutch Housing, Rear) 308; (HH) Hy, 27095.

INTERNATIONAL HARVESTER—1915-16 (N. E. 1,500 lbs.)—Tim. Brgs.; (A) 2760-2720;  
(B) 2150-2120; (D) 3554-3520; (E) 3156-3120.  
1916-17 (1,500-2,000 lbs.)—Tim. Brgs.; (A) 419-412; (B) 317-312; (D) Bower, 309N; Hy, 16667;  
(E) Bower, 309N; Hy, 16667; (Jackshaft) Bower, 306NDT; (G & H) Hy, 16667;  
(AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
1917-18-19 (K-1 1/2, G-2 Ton)—(D & E) Hy, 26662; (G & H) Hy, 16667.  
1918-19 (H-1 1/2, F-1 Ton)—(D & E) Hy, 16667; (G & H) Hy, 16667.  
1919 (3 1/2 Ton)—(D) Hy, 58756; (E) Hy, 47893; (G & H) Hy, 27884.

INTERNATIONAL (Truck)—1914 (S 2nd Ser.)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320;  
(D) 4550-4520; (E) 4361-4320.  
1914 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3350-3320; (C) 341-3320; (D) 4550-4520; (E) 4361-4320.  
1914 (1 1/2, 2 Ton)—Tim. Brgs.; (A & D) 4550-4520; (B & E) 4361-4320; (C) 443-4320.  
1914 (T 3 1/2 Ton)—Tim. Brgs.; (A) 5557-5520; (B) 4367-4320; (D) 6552-6521; (E) 6354-6321.  
1915 (AB 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720;  
(G & H) 559C-552; (H) 456C-454; (J & K) 539C-532.  
1915 (AB 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520;  
(G & H) 559C-552; (J & K) 539C-532.  
1915 (AB 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (C) 341B-3320; (D & E) 4553-4520;  
(G & H) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (AB 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520;  
(G & H) 559C-552; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
1916 (AB 1 1/2-Ton Chain)—Tim. Brgs.; (A & D) 4558-4520; (B) 3360-3320; (C) 341-3320;  
(E) 4361-4320; (G & H) 395-3920; (J) 3752-2720; (K) 3554-3520; (AA, BB, DD & EE) 335-3320; (GG) 1550-1530.  
1916 (AC 3 1/2-Ton)—Tim. Brgs.; (A) 5556-5520; (B & E) 5355-5320; (D) 6356-6321; (G & H) 5557-5520;  
(J) 3360-3320; (K) 3362-3320; (AA) 455-4520; (BB) 539-532; (DD & EE) 5355-5320.

1916 (AC 5 1/2-Ton)—Tim. Brgs.; (A) 6356-6321; (B) 5355-5320; (D) 6550-6521; (E) 6354-6321;  
(G & H) 5557-5520; (K) 3360-3320; (AA) 455-4520; (BB) 539-532; (DD & EE) 5355-5320.  
1917 (AB 1-Ton Chain)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4558-4520; (E) 4361-4320;  
(G & H) 395-3920; (J) 2752-2720; (K) 3554-3520; (AA) 337-3320; (BB, DD & EE) 335-3320.

1917 (AB 1-Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720;  
(G & H) 559-552; (H) 456-454; (J & K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320; (GG) 1550-1530.  
1917 (AB 1 1/2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520;  
(G & H) 559-552; (J) 235-2330; (K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320; (GG) 1550-1530.

1917 (AC 5 1/2, 7 1/2 Ton)—Tim. Brgs.; (A) 6356-6321; (B) 5355-5320; (D) 6550-6521; (E) 6354-6321;  
(G & H) 5557-5520; (J) 3360-3320; (AA) 455-4520; (BB) 539-532; (DD & EE) 5355-5320; (GG) 1550-1530.  
1918 (A, B, 1 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720;  
(G & H) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1918 (A, B, 1 1/2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520;  
(G & H) 559C-552; (J & K) 539C-532; (O) 305; (Q) 209RT; (AA) 337-3320; (BB, DD & EE) 335-3320; (GG) 550-530.  
1918 (A, C, 3 1/2 Ton)—Tim. Brgs.; (A) 5556-5520; (B, E, DD & EE) 5355-5320; (D) 6356-6321;  
(G & H) 5557-5520; (J) 3360-3320; (AA) 455-4520; (BB) 539-532; (GG) 550-530.

1920 (A, B, 1 1/2, 2 1/2 Ton Worm Drive)—Tim. Brgs.; (A) 4550-4520; (B) 3556-3520; (D & E) 5557-5520;  
(G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (Motor Cross Shaft, R. & L. Hand) 235-2330;  
(AA & BB) 357-353; (DD & EE) 339-333.  
1920 (A, B, 1 1/2 Ton Chain Drive)—Tim. Brgs.; (A & D) 4550-4520; (B) 3556-3520; (E) 4361-4320;  
(G & H) 395-3920; (J) 2752-2720; (K) 4364-4320; (Motor Cross Shaft, R. & L. Hand) 235-2330;  
(AA & BB) 357-353; (DD & EE) 339-333.

1920 (AB, 2 Ton Chain Drive)—Tim. Brgs.; (A) 4550-4520; (B) 3556-3520; (D) 5550-5520;  
(E) 5355-5320; (G & H) 395-3920; (J) 2752-2720; (K) 4364-4320; (Motor Cross Shaft, R. & L. Hand) 235-2330;  
(AA & BB) 357-353; (DD & EE) 339-333.  
1920 (AB, 1 1/2, 2 1/2 Ton Dual Reduction)—Tim. Brgs.; (A) 4550-4520; (B) 3556-3520;  
(D & E) 5557-5520; (G & H) 5557-5520; (J) 3951-3920; (K & Reduction Shaft, R. & L. Hand) 4553-4520;  
(Motor Cross Shaft, R. & L. Hand) 235-2330; (AA & BB) 357-353; (DD & EE) 339-333.

1920 (AC, 3 1/2 Ton Chain Drive)—Tim. Brgs.; (A & D) 6356-6321; (B, E, DD & EE) 5355-5320;  
(G & H) 5557-5520; (K) 3360-3320; (Motor Cross Shaft, R. & L. Hand) 235-2330; (AA) 455-4520; (BB) 539-532; (Reverse Shaft, F. & R.) 3362-3320; (GG) 1550-1530.  
1920 (AC, 5, 6, 7 1/2 Ton Chain Drive)—Tim. Brgs.; (A) 6356-6321; (B, DD & EE) 5355-5320;  
(D) 6550-6521; (E) 6354-6321; (G & H) 5557-5520; (K) 3360-3320; (Motor Cross Shaft, R. & L. Hand) 235-2330;  
(AA) 455-4520; (BB) 539-532; (Reverse Shaft, F. & R.) 3362-3320; (GG) 1550-1530.

INTERSTATE—1915-16 (Mod. T-TR)—(D & E) Hy, 16779; (G & H) Hy, 26252; (I) Hy, 16352;  
(AA) SR 206; Hy, 26518; (BB) SR 307; (DD & EE) 206.  
1918 (T Series)—(D & E) Hy, 16779; (G & H) Hy, 26252; (AA) Hy, 26518.  
1917-18 (850 lbs. Del.)—(D & E) Hy, 16779; (G & H) Hy, 26252; (AA) Hy, 26518.  
1916-17 (BB) 307; (DD & EE) 206.

JACKSON—1914-15 (43-48)—(D) 310; (E) 210; (J) 0207; (K) 30407; (O) 0305; (AA) 2126  
(BB) 307.  
1914—(F) 312; (G & H) 212; (J) 311; (K) 308.  
1920-21 (6-38)—(A) Br, 335-TXL; (B) Br, 236-TX; (F) 310DR; (G & H) Tim, 366-363;  
(J) 307DR; (K) Hy, 57883.

JACKSON (Truck)—1920 (4-WD)—(A, B, D & E) Tim, 749-742; (G & H) Tim, 366-363;  
(C) Hy, 27988.

JEFFREY—1914-15 (Four-93)—(D) 309; (E) 209; (G & H) ND. 0211; (J) 0208; (K) 0308;  
(AA) 1210; (BB) 208; (DD & EE) 306.  
1915-16 (Chesterfield 6-22)—(D) 309; (E) 209; (G & H) 309, ND. 0309; (J) 306; (K) 1307;  
(M) 2107; (O) Hy, 16828; (AA) 210; (BB) 208; (CC) Hy, (DD & EE) 306; (GG) 203.  
1916-18 (No. 23)—(D) 309; (E) 209; (G & H) 309; (J) 407; (K) 405; (O) Hy, 16987; (U) ND.  
305; (AA) 210; (BB) 208; (DD & EE) 306; (GG) ND. 03; (HH) 205.  
1916-17 (4-72)—(O) 205.

1915-16-17 (462, 472, 661, 671)—(O) 205; (Q) Brg. Co. of Amer., 776A; (GG) 302.

JEFFERY QYAD—1915 (Quad 2-Ton)—Tim. Brgs.; (A & D) 5563-5520; (B & E) 4361-4320;  
(C) 443-4320; (J) 365-3520; (K) 315-312.  
1916 (1 1/2 Ton)—(D & E) Hy, 26665; (G & H) Hy, 26057; (K) Hy, 26777.  
1916-17 (Quad 2-Ton)—Tim. Brgs.; (A & D) 5563-5520; (B & E) 4361-4320; (C) 443-4320;  
(G) 462-4520; (H) 397-393; (J) 357-353; (K) 420-414.  
1916-17 (Quad 2-Ton)—Tim. Brgs.; (A & D) 6355-6320; (B & E) 5355-5320; (C) 5354-5320;  
(G & H) 462-452; (J) 419-412; (K) 3196-3120.

JONES—1916-17-18 (6)—(D & E) Hy, 16691; (G & H) Hy, 26062; (AA) Hy, 27797; (BB)-  
Hy, 27899; (DD & EE) 26972; (FF) Hy, 26956.  
1918 (1 Ton)—(H) Hy, 26219; (AA) Hy, 27791; (DD) Hy, 17014; (EE) 16506.  
1918 (2 Ton)—(G) Hy, 26084; (H) Hy, 26085; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16561.  
1919 (1 Ton)—(G) Hy, 26219; (AA) Hy, 27797.  
1920 (2550 F, R)—(A) Bk, N307; (B) Bk, N305; (D & E) Bk, 276-27; (G & H) Bk, N210;  
(K) Bk, 3191-3110; (J) Bk, N308.  
1920 (3070-F-R)—(A) Bk, N308; (B) Bk, 316-31; (D & E) Bk, N209; (G & H) Bk, N210;  
(K) Bk, N307; (J) Bk, 537-53.

JORDAN—1917 (Mod. B)—Tim. Brgs.; (A) 337-3320; (B) 235-2330; (E) 435T-4320; (G & H)  
375T-3720; (J) 255-2530; (K) 417-413; (O) ND. 1205; (BB) ND. 1307.  
1918 (C)—Tim. Brgs. from A-K—(A) 415-412; (B) 2382-2330; (D) 458T-454; (G & H)  
375T-3720; (J) 317-312; (K) 439T-432; (O) 205; (AA) 208DR.  
1919 (F)—Tim. Brgs. from A-K—(A) 415-412A; (B) 2382-2330; (F) 458T-454; (G & H) 377-3720;  
(J) 3196-312; (K) 439T-432; (O) 205; (P) 308; (Q) 210; (AA) 208DR; (BB) 307; (DD & EE) 305; (KK & LL) Spec.  
1920 (F)—Tim. Brgs. from A-K—(A) 415-412A; (B) 2382-2330; (F) 458T-454; (G & H)  
377-3720; (J) 3196-312; (K) 439T-432; (O) 205; (P) 308; (Q), AA 210; (BB) 307; (DD & EE) 305; (KK & LL) Spec.  
1920 (M)—Tim. Brgs. from A-K—(A) 317-312; (B) 2687-2620; (F) 415T-412A; (G & H)  
359S-3520; (J) 2785-2720; (K) 3381-3320; (O) 205; (P, Q & AA) 210; (BB) 307; (KK & LL) Spec.

KALAMAZOO—1920-21 (G)—(A) Tim, 3762-3720; (B) 3360-3320; (F) B. 311DR; (G & H)  
213; (J) 407; (M) 5407DR; (O) 205; (P) 208; (Q) 620 Spec.; (AA) 307-308; (BB) 308; (CC)  
304; (DD & EE) 306; (GG) C-2785.  
1920-21 (H)—(A) SRB. N310; (B) SRB. N308; (F) 3141; (G & H) 217; (J) 408; (M) 408-3107D;  
(O) 205; (P) 208; (Q) 620 Spec.; (AA) 307-308; (BB) 308; (CC) 304; (DD & EE) 306; (GG) C2785.  
1920-21 (K)—(A) N312; (B) N311; (F) 317; (G) 219; (I) 918; (J) 409; (M) 410-3110D; (O)  
205; (P) 208; (Q) 620 Spec.; (AA) 307-308; (BB) 308; (CC) 304; (DD & EE) 306; (GG) C2785.

KANKAKEE—1919-20 (E, P)—(A) Tim, 3554; (B) Tim, 3360; (D) Br, S-20; (E) Br, S-19;  
(G) Hy, TR. 34; (H) Hy, TR-38; (J) Hy, 3-D-TR; (K) Hy, TR-8; (N) 307; (O) 205; (P)  
211; (Q) 3806; (S & AA) 4001; (BB) 307; (DD & EE) 17763; (GG) C1161; (K) RA-48.

KEARNS—1918 (D 1/4 Ton)—(D & E) Bower, 208A.  
1920 (H 1/2, N 1/2 Ton)—(CC) Hy, 16950.

KEELAND ELEC. TRUCK—1919 (A, B)—Tim. Brgs.; (A & D) 3750-3720; (B & E) 3350-3320.  
1919 (D)—Tim. Brgs.; (A & D) 4550-4520; (B & E) 4361-4320; (Sprocket Shaft) 375-3720.

KELLY-SPRINGFIELD—1915 (O-5)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (Q)  
6550-6521; (E) 6354-6321; (G & H) 3955-3920.  
(K 36)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (C) Tim, 443-4320; (E) Bower, 316N;  
(G & H) Tim, 5756-5720; (J & K) Tim, 559-552; (N) Dr. Shaft Hy, 16699; (AA) Hy, 26537;  
(BB) Hy, 26697; (CC) K-128 Covert; (DD & EE) Hy, 16698; (GG) 820 & 2360 SKF.  
(K 40 & 45)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (C) Pen-31 Std. Roller; (D) Tim,  
6356-6321; (E) Tim, 5355-5320; (G & H) Tim, 3955-3920; (J) Tim, 4364-4320; (N) Hy,  
16979; (AA) Hy, 57889; (BB) Hy, 57898; (CC) K-128 Covert; (DD & EE) Hy, 16748; (FF)  
K-106A Covert.  
(K 50 & 60)—(A) Tim, 5550-5520; (G) Tim, 5311-5320; (C) Pen-31 Std. Roller; (D) Tim,  
6554-6521; (E) Tim, 6359-63210 (G & H) Tim, 3955-3920; (J) Tim, 4354-5320; (N) Dr  
Shaft Hy, 16979; (AA) Hy, 56493; (BB) Hy, 56687; (CC) F-128 Covert; (DD & EE) Hy,  
16686; (FF) F-108A Covert.

1916-17-18 (K-31 1/2 Ton)—(A) Bower, 5351T; (B) Bower, 3360T; (D) Bower, 3958T;  
(E) Bower, 3556T; (G & H) Hy, 26056; (Hoist Brg., Hy, 16698).

1917-18 (K-32 1/2 Ton)—(F) Bower, 314NDT.

1917-18 (K-36 2 1/2 Ton)—(F) Bower, 316NDT.

1920-21 (K31, 1 1/2 Ton)—(A) Br, 5351T; (B) Br, 3360T; (D) Br, 3958T; (E) Br, 3556T;  
(G, H & Jackshaft, Inner and Outer) Hy, 26056; (M & N) Hy, 26827; (AA) Hy, 26733;  
(BB) Hy, 27794; (CC) Covert; G1-128; (DD & EE) Hy, 16516; (GG) 205-303.

1920-21 (K32, 1 1/2 Ton)—(A) Br, 5351T; (B) Br, 3360T; (F) Br, 314N; (G, H and Jack-  
shaft, Inner and Outer) Tim, 6453-6420; (L & M) Tim, 539-532; (N) Hy, 26827; (AA) Hy,  
26733; (BB) 27794; (CC) Covert G1-128; (DD & EE) Hy, 16516; (GG) 205-303.

1920-21 (K32, 1 1/2 Ton)—(A) Br, 5351T; (B) Br, 3360T; (F) 312DR; (G, H & Jackshaft,  
Inner and Outer) 216DR; (L) 407; (M) 410DR; (N) Hy, 16516; (GG) 205-303.  
1920-21 (K34, 1 1/2 Ton)—(A) Br, 5351T; (B) Br, 3360T; (F) 312DR; (G, H & Jackshaft,  
Inner X Outer) 216DR; (L) 407; (M) 410DR; (N) Hy, 26827; (O) 206; (AA, DD & EE)  
308; (BB) 212; (CC) Covert G1-128; (GG) 205-303.

1920-21 (K34, 1 1/2 Ton)—(A) Br, 5351T; (B) Br, 3360T; (F) Br, 314N; (G, H & Jackshaft,  
Inner and Outer) Tim, 6453-6420; (L & R) Tim, 539-532; (O) 205; (AA, DD & EE) 308;  
(BB) 212; (CC) Covert G1-128; (GG) 205-303.

1920-21 (K35, 2 1/2 Ton)—(A) Tim, 4550-4520; (B) 4361-4320; (C) 443-4320; (D) Tim, 5550-5520;  
(E) 5355-5320; (G, H and Jackshaft, Inner and Outer) Hy, 26056; (M & N) Hy,  
16969; (O) 205; (AA, DD & EE) Hy, 16698; (BB) Hy, 26557; (CC) Covert K128; (GG) 205-303.

1920-21 (K36-2 1/2 Ton)—(A) Tim, 4550-4520; (B) 4361-4320; (C) 443-4320; (F) Br, 316N  
(G, H & Jackshaft, Inner and Outer) Tim, 5756-5720; (L & M) Tim, 559-552; (N) Hy,  
16969; (AA) Hy, 26697; (BB) Hy, 26557; (CC) Covert K128; (DD & EE) Hy, 6698; (GG)  
205-303.

1920-21 (K36, 2 1/2 Ton)—(A) Tim, 4550-4520; (B) 4361-4320; (C) 443-4320; (F) 314DR;  
(G, H & Jackshaft, Inner and Outer) 217DR; (M & N) Hy, 16969; (AA, DD & EE) Hy,  
26557; (BB) Hy, 26577; (CC) Covert, K-128; (GG) 205-303.

1920-21 (K38, 2 1/2 Ton)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (F) 314DR; (G, H  
& Jackshaft, Inner and Outer) 217DR; (L & M) 408; (O) 205; (AA) 209; (BB) 212;  
(CC) Covert, G1-128; (DD & EE) 308; (GG) 205-303.

1920-21 (K38, 2 1/2 Ton)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (F) Br, 316N; (G, H  
& Jackshaft, Inner and Outer) Tim, 5756-5720; (L) 559-552; (AA) 309; (BB) 212; (CC)  
Covert G1-128; (DD & EE) 308; (GG) 205-303.

1920-21 (K40, 3 1/2 Ton)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 6356-6361;  
(E) 5353-5320; (G, H & Jackshaft, Inner and Outer) Tim, 3955-3920; (M & N) Hy,  
16979; (AA) Hy, 57896; (BB) Hy, 57789; (DD & EE) Hy, 16748.

1920-21 (K41, 3 1/2 Ton)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Hy,



**KIMBALL—1919-20-21 (A, 1½, AB 2 Ton)**—(A) Bk. 310; (B) Bk. 308; (C) A-392; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR; (O) 205; (P) 208DR; (Q) Gar. 209; (AA) Tim. 337-3320; (BB) Tim. 339-333; (CC) 306; (DD & EE) Tim. 319-313; (GG) Hy. 27097; (KK & LL) Spec.

**1919 (2 Ton)**—(A) Bk. 309; (B) Bk. 308; (C) A-392; (F) 314DR; (G & H) 217DR; (J & K) 408; (M) 3107-D; (O) 205; (P) 208DR; (Q) Gar. 209; (AA) Tim. 337-3320; (BB) Tim. 339-333; (CC) 306; (DD & EE) Tim. 319-313; (GG) Hy. 27097; (KK & LL) Spec.

**1919-20-21 (C2½, AC2½, K3, AK3 Ton)**—(A) Bk. 310; (B) Bk. 309; (C) A-392; (F) 314DR; (G & H) 217DR; (J & K) 408; (M) 3107-D; (O) 205; (P) 208DR; (Q) Gar. 209; (AA) Tim. 337-3320; (BB) Tim. 339-333; (CC) 306; (DD & EE) Tim. 319-313; (GG) Hy. 27097; (KK & LL) Spec.

**1919-20-21 (E4, AE4 Ton)**—(A) Bk. 312; (B) Bk. 311; (C) A-415; (F) 319DR; (G & H) 219-18; (J) 409; (K) 410; (M) 3110-D or 1718-D; (O) 205; (P) 208DR; (Q) Gar. 209; (AA) Tim. 439-4320; (BB) Tim. 435-4320; (CC) 335; (DD & EE) Tim. 415-412; (GG) Hy. 27097; (KK & LL) Spec.

**1919-20-21 (F5, AF5 Ton)**—(A) Bk. 312; (B) Bk. 311; (C) A-415; (F) 319DR; (G & H) 219-18; (J) 409; (K) 410; (M) 3110-D or 1718-D; (O) 205; (P) 208DR; (Q) Gar. 209; (AA) Tim. 439-4320; (BB) Tim. 435-4320; (CC) 335; (DD & EE) Tim. 415-412; (GG) Hy. 27097; (KK & LL) Spec.

**KING—1915 (Mod. C)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310; (G & H) ND. 0210; (J) ND0306; (K) ND 0406; (O) 205; (AA) Hy. 17024; (BB) Hy. 15562; (DD & EE) Hy. 15506.

**(Mod. B)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310; (K) DR. 407; (O) 205; (AA) Hy. 17024; SR 305; (BB) Hy. 15562; SR 307; (CC) 304; (DD & EE) Hy. 15506.

**1915-16 (Mod. D)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310; (G & H) ND. 0210; Gurney, 210W; (J) ND 0306; (K) 406; (O) 205; (AA) Hy. 17024; (BB) Hy. 15562; (DD & EE) Hy. 15506.

**1915-17 (Mod. E)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310RT; (G & H) 210RT; (J) DR 306; (K) 406 Radial; (O) 1205; (AA) Hy. 17024; (BB) Hy. 15562; (GG) 445 & 492.

**1915-19 (Mod. F)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310; (G & H) ND. 0210; (J) DR 306; (K) 406 Radial; (O) 1205; (AA) Hy. 17024; (BB) Hy. 15562; (GG) 445 & 492.

**1919 (G)**—(A) Bk. 418; (B) Bk. 235; (D, E & F) 310; (G & H) ND. 0210; (J) DR 306; (K) 406 Radial; (O) 1205; (AA) Hy. 17024; (BB) Hy. 15562; (GG) 445 & 492.

**1919-20-21 (H, J)**—(A) Bk. 418; (B) Bk. 235; (D, E, I) Bk. 375; (J) Bk. 335; (K) 449; (AA) Hy. 16828; (BB) 407; (CC) 205 Ann.

**KISSEL—1913-15 (L-D13, H13-14, 6-42 & 4-36)**—(A) Tim. 2760-2720; (B) Tim. 2650-2620; (D & E) Tim. 3762-3720; (G & H) Tim. 3757-3720; (J & K) Tim. 3158-3120; (N) 307; (O) 205; 205; (AA) 306; (CC) 307.

**1915—(O) 205; (AA) 211; (BB) 307.**

**1916 (1½ Ton)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 4553-5520; (G & H) 559C-552; (J & K) 539C-532.

**1916 (4-36, 6-42, 4-30)**—(A) Tim. 337-3320; (B) Tim. 236-2320; (D & E) Tim. 375-3720; (G & H) Tim. 3757-3720; (J & K) Tim. 3158-3120; (O) 205; (AA) 210; (BB) 307; (DD & EE) Hy. 17799.

**1917 (½ Ton, 100 Point Six-42)**—(A) Tim. 337-3320; (B) Tim. 236-2320; (D & E) Tim. 375-3720; (G & H) Tim. 3757-3720; (J & K) Tim. 3158-3120; (N) 307; (O) 205; (AA) 210; (BB & CC) 307.

**(G & H) Tim.** Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539-532.

**1917-18 (1½ Ton)**—(A) Bower, 307; (DD & EE) Hy. 17799.

**1917-18 (3½ Ton)**—(F) Bower, 317NDT.

**1917-18 (6-42 Double 6)**—(DD & EE) Hy. 17799.

**1917-18 (6-42 Double 6)**—(DD & EE) Hy. 17012.

**1919 (100 pts. six)**—(DD & EE) Hy. 17012.

**1919-20-21 (G, U)**—(A) Bk. N308; (B) Bk. N307.

**1919-20-21 (H, D)**—(A) Bk. N312; (B) Bk. N311.

**KLEIBER—1916 (1 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 553-5520; (G & H) 559C-552; (J & K) 539C-532.

**1916 (1½ Ton)**—Tim. Brgs.; (A) 337-3320; (BB, DD & EE) 335-3320.

**1916 (2½ Ton)**—(A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D) 5550-5520; (E) 5355-5320; (G & H) 375-3720; (J) 256-2520; (K) 415-412.

**1916 (3 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6551-6520; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552.

**1916 (3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6356-6321; (E) 5355-5320; (G & H) 375-3720; (J) 336-3320; (K) 435-4320; (AA & BB) 440-4320; (DD & EE) 415-412.

**1917 (Mod. A)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539-532; (AA) 337-3320; (BB) 415-412; (DD & EE) 335-3320.

**1917 (Mod. A)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E, G & H) 5755-5720; (J & K) 559-552; (AA) 439-4320; (BB) 440-4320; (DD & EE) 415-412.

**1917 (Mod. C)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (C) 341-3320; (D) 5550-5520; (G & H) 477-473; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

**1919 (1 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (O) 205; (BB) 277; (CC) 235; (DD & EE) 306-303; (GG) Hy. R. H. 2909.

**1919 (1½ Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (O) 204; (P) 307; (Q) 209DR; (AA) 336-3320; (BB) 419-412; (CC) 306; (DD & EE) 339-3320; (GG) Hy. R. H. 2909.

**1919 (2 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (O) 204; (P) 308; (Q) 209DR; (AA) 336-3320; (BB) 419-412; (CC) 306; (DD & EE) 339-3320; (GG) Hy. R. H. 2909.

**1919 (2½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539D-532; (O) 305; (P) 308; (Q) 210DR; (AA & BB) 439-4320; (CC) 335; (DD & EE) 415-412; (GG) Hy. R. H. 2909.

**1919 (3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559E-552; (K) 6375E-6323; (O) 306; (P) 308; (Q) 210DR; (AA & BB) 439-4320; (CC) 335; (DD & EE) 415-412; (GG) Hy. R. H. 2909.

**1919-20 (5 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 5351-5320; (C) 5354B-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6375E-6321; (O) 305; (P) 308; (Q) 210DR; (AA & BB) 439-4320; (CC) 335; (DD & EE) 415-412; (GG) Hy. R. H. 2909.

**1920 (1 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (O) 205; (BB) 207; (CC) 235; (DD & EE) 306-303; (GG) Hy. R. H. 2909.

**1920 (1½ Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (O) 204; (P) 307; (Q) 209DR; (AA) 336-3320; (BB) 419-412; (CC) 306; (DD & EE) 339-3320; (GG) Hy. R. H. 2909.

**1920 (2 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (O) 204; (P) 307; (Q) 209DR; (AA) 336-3320; (BB) 419-412; (CC) 303; (DD & EE) 339-3320; (GG) Hy. R. H. 2909.

**1920 (2½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D & E) 5557-5520; (G & H) 559-552; (J) 5578E-5521; (K) 539E-532; (O) 305; (P) 308; (Q) 210DR; (AA & BB) 439-4320; (CC) 335; (DD & EE) 415-412; (GG) Hy. R. H. 2909.

**1920 (3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 6375E-6323; (K) 559-552; (O) 305; (P) 308; (Q) 210DR; (AA & BB) 439-4320; (CC) 335; (DD & EE) 415-412; (GG) Hy. R. H. 2909.

**KLING KAR—1916 (Mod. 6-36E)**—(D & E) Bower, 209; (H) 209; (J) 207; (K) 307; (O) 205; (AA) 210; (CC) 307; (DD) 206; (EE) 306.

**1917 (Mod. 6-38F)**—(A) Bower, 307N; (B) Bower, 305AL; (D & E) Bower, 209; (G) Bower, 209A; (H) 209; (J) 207; (K) 307; (O) 205; (AA) 210; (CC) 307; (DD) 206; (EE) 306.

**1918 (Mod. 6-38 G-A)**—(A) Bower, 305; (B) Bower, 307; (D & E) Bower, 209; (H) 209; (J) 207; (K) 307; (O) 205; (AA) 210; (CC) 307; (DD) 206; (EE) 306.

**1919 (Mod. 6-42 H)**—(A) Bower, 307; (D & E) Bower, 209; (H) 209; (J) 207; (K) 307; (O) 205; (AA) 210; (CC) 307; (DD) 206; (EE) 306.

**1919-20-21 (6-55, K)**—(A & J) Bk. N307; (B) Bk. N305; (D & E) Bk. N207; (G & H) Bk. 336; (K) Bk. 315.

**1919 (6-55)**—(CC) Hy. 16820; (EE) Hy. 16950; (GG) Hy. 29097.

**1920 (6-55, J)**—(O) 205; (AA) 308; (BB) 307; (CC) Hy. 16950; (DD & EE) 305; (GG) Hy. 29097.

**1920 (2550F, R)**—(A) Bk. N307; (B) Bk. N305; (D & E) Bk. 276-27; (G & H) Bk. N210; (J) Bk. 3191-3110; (K) Bk. N308.

**KNOX—1914 (Mod. 31)**—Tim. Brgs.; (A & B) 3762-3720; (D) 6356-6321; (E) 5355-5320. **1914 (Mods. 35 & 36, Tractor 35)**—(A) Tim. 455-4520; (B) Tim. 3360-3320; (C) Tim. 436-4320; (D) Tim. 6550-6521; (E) Tim. 6354-6321; (G) S.R.O. 365-D.R. 217; (H) S.R.O. 365D or D.R. 215; (I) SKF. 915; (J) 1307; (K) 313; (AA) S.R.O. 362D or N.D.212; (BB) S.R.O. 306 or D.R. 307; (CC) S.R.O. 312D or 306 or D.R. 313 & 307; (DD) X.R.O. 336 or 408; (EE) S.R.O. 335D or D.R. 407; (GG) A204.

**1914 (2 Ton)**—(G, H & K) 312; (AA & BB) 309; (CC) 306; (DD & EE) 307.

**1915-17-18 (Mod. 35)**—Tim. Brgs.; (A) 445-4520; (B) 3360-3320; (C) 436-4320; (D) 6550-6521; (E) 6354-6321.

**KOEHLER—1917-18 (K 1½ Ton)**—(D) Bower, 309N; (E) Bower, 306N; (Jackshaft) Bower, 306N.

**1918 (KT 3 Ton)**—(D) Bower, 311N; (E) Bower, 311N.

**1918 (C, 1½ Ton)**—Tim. Brgs.; (A) 3362-3320; (B) 2362-2320; (D) 435-4320; (E) 3191-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412; (O) 205; (AA) 204; (BB) 306; (GG) Hy. 29097.

**1918 (M 2½ Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (AA) 337-3320; (BB) 339-333; (DD & EE) 319-313; (GG) Hy. 29097.

**1919 (K, 1½ Ton)**—(D) 309DR; (E) 306DR; (G & H) Tim. 559-552; (O) 205; (AA) 207; (BB) 306.

**1920 (M)**—Tim. Brgs.; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (GG) Hy. 29097.

**1920—(C 1½ Ton)**—(D) 309DR; (E) 306DR; (O) 205; (AA) 204; (BB) 306; (GG) Hy. 29097.

**KREBS—1915 (Mod. F)**—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA & BB) 335-3320; (DD & EE) 316-312.

**1915 (Mod. G)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA & BB) 335-3320; (DD & EE) 316-312.

**1915 (Mod. H)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (BB) 357-353; (DD & EE) 339-333.

**1916 (Mod. G, H & T)**—(AA & BB) Tim. 357-353; (DD & EE) Tim. 339-333.

**1916 (Mod. L 90-80)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 440-4320; (BB) 435-4320; (DD & EE) 415-412.

**1917 (Mod. 35)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 344-333; (BB) 339-333; (DD & EE) 319-313.

**1917 (Mod. 60)**—Tim. Brgs.; (A) 4550-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 419-412; (BB) 357-353; (DD & EE) 339-333.

**1917 (90 3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.

**L. M. C.—1920 (2-20, 2 ½ Ton)**—(G) Hy. 26084; (H) Hy. 26085; (GG) Hy. 29097.

**LAFAYETTE—1921 (134)**—(A) Tim. 447-432; (B) Tim. 316-312; (C) Tim. 3659-3620; (D & E) Tim. 385-383; (G & H) Tim. 462-453; (J) Tim. 439-432; (K) Tim. 415-412A; (O) 206; (P, BB) 309; (R) Spec. (F) Bower, Hy. 16942; (DD & EE) Hy. 17989; (KK & LL) U S 12C.

**LAMSON—1918 (2½ Ton)**—(F) Bower, 314NDT.

**1918—(3½ Ton)**—(F) Bower, 317NDT.

**1918 (5 Ton)**—(F) Bower, 319NDT.

**LANE—1918 (Mod. F 1½ Ton)**—(A) Bower, 308N; (B) Bower, 307N.

**1918 (Mod. C 3½ Ton)**—(F) Bower, 317NDT; (AA) Hy. 26557; (BB) Hy. 26



**LIPPARD-STEWART—Continued**

1915 (F-G)—Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (C) 341-3320; (D, E, J & K) 5553-5520; (G & H) 559-552; (AA) 337-3320; (BB, DD & EE) 335-3320.  
 1915-17 (H I Ton) Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559-552; (H) 456-454; (J & K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320.  
 1916-17 (M-1,000 lb.)—Tim. Brgs.: (A) 415-412; (B) 316-312; (D) 435T-4320; (G & H) 375-3720; (J & K) 4365-4320; (AA) 337-3320; (AA) Hy, 26518; (BB) Hy, 27899; (DD & EE) 316-312; Hy, 26972; (FF) Hy, 26956.  
 1916 (Mod. W) Tim. Brgs.: (A) 415-412; (B) 316-312; (C) 3656B-3620; (D) 462-4520; (E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (DD & EE) 316-312.  
 1917 (1,500 lbs.)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3650-3620; (D) 462-4520; (E) 365-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
 1917 (1,500 lbs.)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3650-3620; (D & E) 375-3720; (G) 559-552; (H) 456-454; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

**LITTLE GIANT—1915 (Mod. 1 & 2)**—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656B-3620; (D) Tim, 462-4520; (E) Tim, 375-3720; (G) Tim, 559C-552; (H) Tim, 456C-454; (J & K) Tim, 539C-532; (O) 208; (AA) Tim, 277-274; (BB) Tim, 339-333; (DD & EE) 306.

1915 (Mod. 3)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (D & E) 5550-5520; (G & H) 477-473; (J & K) 456-453; (AA) Ann, 221; (BB) Ann, 307; (DD) Hy, X4002; (EE) Hy, 16820; (GG) Oakes C1501 & 1502.  
 1916 (Mod. 3)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 553-5520; (O) Ann, 306; (P) Ann, 304; (S) Ann, 307; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
 1917 (Mod. 1)—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (AA) 222; (BB) 309; (CC) 212; (DD & EE) 308; (GG) Oakes X1610, 14 balls.  
 1917 (Mod. 15, 1/2 Ton)—Tim. Brgs.: (A) 415-412; (B) 316-312; (C) 3656B-3620; (D) 642-4520; (E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 277-274; (BB) 339-333; (DD & EE) Hy, 17799.  
 1917 (Mod. 16, 2 Ton)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; Hy, 17026; (BB) 335-3320; Hy, 16684; (DD & EE) 316-312; Hy, 16506.  
 1918 (H 1 1/2 Ton)—(D) Bower, 4553T; (E) Bower, 3554T.

**LOCOMOBILE—1909 (Mod. 1-2)**—(A) 309; (B) 405; (D) 309; (E) 405; (AA) 211; (DD & EE) 307.

1909 (Mod. 1-3)—(A) 309; (B) 405; (D) 309; (E) 405; (AA) 211; (BB) 308; (DD & EE) 307.  
 1909-10 (L-1, 2)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 310; (J) 310; (K) 408; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 204.  
 1911 (L-3)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 310; (J) 309; (K) 408; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 204.  
 1912 (L-4)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 310; (J) 311; (K) 411; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 204.  
 1911 (M-1)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 310; (J) 309; (K) 408; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 202 & 203.  
 1912 (M-2R-1)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 301; (J) 311; (K) 411; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 202 & 203.  
 1909-10-11-12 (Pless.)—(A) Tim, 3554-3520; (B) Tim, 3360-3320.  
 1912-13-14 (5 Tons)—(A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321; (G & H) 6552-6521; (AA) 5557-5520.  
 1913-14-15 (M-3, 4, R-2, 3, L-5)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 212; (G & H) 310; (J) 311; (K) 411; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 2-204.  
 1915 (M-5, R-4)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 312; (J) 311; (K) 411; (AA) 209; (BB) 308; (DD & EE) 307; (GG) 2-303.  
 1915-16-17 (3 & 4 Ton B-BB)—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6550-6520; (E) 5755-5720; (AA) 309; (DD & EE) Ann, 308; (GG) Ann, 303 & Traf 8303.  
 1915 (Little 6-R, Big 6-M)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 312; (J) 311; (K) 408; (L) 110; (M) 113; (N) 304; (O) Mod. M-305, Mod. R-304; (DD & EE) 307; (GG) 303.  
 1916 (M-6)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 312; (J) 311; (K) 412; (AA) 211; (BB) 305; (DD & EE) 307; (GG) 303.  
 1916 (Little 6-R, Big 6-M)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 312; (J) 311; (K) 412; (AA) 211; (BB) 305; (DD & EE) 307; (GG) 303.  
 1917 (M-7, R-7)—(A) Tim, 3554-3520; (B) Tim, 3360-3320; (D) 311; (E) 211; (G & H) 312; (J) 312; (I) 813; (J) D.R. 311; (K) 412; (N) 304; (O) 307; (P) 210; (AA) 211; (BB) 308; (CC) 211; (DD & EE) 307; (GG) DR 303.  
 (Mod. M-8, R-8)—(A) Tim, 3554-3520; (B) Tim, 3360-3320.  
 (Mod. A Truck)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 6550-6521; (E) Tim, 6354-6320; (AA) 411; (BB) 113.  
 (Mod. AA Truck)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 6550-6521; (E) Tim, 6453-6420; (AA) 411; (BB) 113.  
 (Mod. E-1, 2, 3, 4)—(A) D & E 307; (B & E) 305.  
 1919 (M-48)—(D & J) 311; (E, G, AA & CC) 211; (G & H) 312; (K) 412; (O, DD & EE) 307; (Q) 210RT; (BB) 306; (GG) 303.

**LONG ISLAND (Truck)—1914 (4,000 lbs.)**—Tim. Brgs.: (A) 4550-4520; (B) 5351-5320; (C) 443-4320; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539-532.  
 1914 (7,500 lbs.)—Tim. Brgs.: (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320 (G & H) 375-3720; (J) 336-3320; (K) 435-4320.

**LORRAINE—1920 (2050-F)**—(A) Bk, 317-31; (B) Bk, 235-23.

**LOUISIANA—1921**—(A) Br, 336TX; (B) Br, 236TX; (C, Q, KK & LL) Spec.; (D) 311DR; (G, H & I); Tim. 366-363; (J) 307DR; (K) Hy, 87883; (O) 205; (P, AA) 210; (BB) 307; (CC) Hy, 16828; (DD) 305; (EE) 306; (GG) Hy, 877-600.

**LOZIER—1911-12 (22-51)**—(A) Tim, 460-4520; (B) Tim, 417-412.

1913 (Mod. 72)—(A) 306; (B) 309; (D) 310; (E) 210; (G & H) 311; (J) 207; (K) 310; (Q) 305; (A) 308; (BB) 210; (DD) 306; (EE) 403; (GG) 301 & 201.

1914 (77-82-84)—(A) Tim, 419-412 N.D. 0406; (B) Tim, 316-312; N.D. 0409; (C) Tim, 3656B-3620; (D & E) Tim, 375-3720; (G) Tim, 456-454; (H) Tim, 559-552; (J) Tim, 439-4320; N.D. 308; (K) Tim, 539-532, 408; (Q) 305; (AA) Tim, 385-383; (BB) Tim, 339-3320; (CC) 305; (DD & EE) 307; (GG) 201 & 201.

1915 (4-34)—Tim. Brgs.: (A) 419-412; (B) 316-312; (CC) 3656B-3620; (D & E) 375-3722; (G) 456-454; (H) 559-552; (J) 461T-454; (K) 415T-412; (AA) 385-383; (BB) 339-3320.

1915 (Mod. 77)—(A) 306; (B) 309; (D) 310; (E) 210; (G & H) 312; (J) 307; (K) 407; (Q) 305; (AA) 308; (BB, DD & EE) 307; (CC) 305; (GG) 201 & 201.

1917 (All Mods.)—Tim. Brgs.: (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

**LUEDINGHAUS—1919 (1 1/2 Ton)**—(A) Tim, 435; (B) Tim, 3191; (F) 311DR; (G & H) 213; (J & K) 407; (N, BB) 307; (O) 205; (S, AA) 308; (DD & EE) 305.

1919 (2 Ton)—(A) Tim, 3782; (B) Tim, 3360; (F) 313DR; (G & H) 213; (J) 309; (K) 2-409-RT; (N, BB) 307; (O) 205; (S, AA) 308; (DD & EE) 305.

**LUVERNE—1914-15 (7-60)**—(F) 311; (G & H) Hy, 26059; (K) 308; (O) 205; (AA) 308; (BB) 307; (CC) 304; (DD & EE) 305.

1916 (Pless.)—(A) Tim, 415-412; (B) Tim, 316-312.

1917 (17-76a)—(A) Tim, 419-412; (B) Tim, 316-312; (C) 3656B-3620.

1918—(A) Br, 308AXL; (B) Br, 305AXL.

1920—(A) Brm 419TX; (B) Br, 257TX.

**LYONS-KNIGHT—1914-15 (Mod. K)**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D, G & H) 475-473; (E) 385-383.

**McFARLAN—1913-14-15 (6-T, X)**—(G & H) Hy, 26059; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.

1917 (All Models)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (AA & QB) 344-333; (DD & EE) 316-312.

1920 (CB-6)—Tim. Brgs.: (A) 337-3320; (B) 236-2330; (D & E) 375-3720; (G & H) 3757-3720; (J) 3186-3120; (K) 417-414; (P & W) Warner T60; (LL) L2-A56.

**McLAUGHLIN 1915 (24-25C)**—D & E Hy, 16691; (G & H) Hy, 26062.

1916 (32) (D & E)—Hy, 26394; (G & H) Hy, 26223; (G & H) Hy, 17024.

**MACCARR—1914-15 (Mod. B)**—Tim. Brgs.: (A) 3750-3320; (D) 4558-4520; (E) 3360-3320; (G & H) 375-3720; (J) 256-2520; (K) 415-412; (AA) 337-3320; (BB, DD & EE) 335-3320.

1915-17 (Mod. E-L)—Tim. Brgs.: (A) 3750-3320; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1915-16 (Mod. D)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (Mod. E-L)—Tim. Brgs.: (A) 3750-3320; (B) 3360-3320; (H & J) 4550-4520; (E & K) 3762-3720; (F & H) 559C-552; (AA) 337-3320; (BB, DD & EE) 335-3320.

1916 (Mod. J)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 6356-6321; (E) 5355-5320; (G) 375-3720; (H) 395-3920; (J) 336-3320; (K) 4354-4320; (AA, BB DD T EE) 335-3320.

1916 (Mod. K)—Tim. Brgs.: (A) 3750-3320; (B) 3360-3320; (D) 5563-5520; (E) 4365-4320; (G & H) 375-3720; (J) 256-2520; (K) 415-412; (AA) 337-3320; (BB, DD & EE) 235-3320.

1917 (H-2 Ton)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 3656B-3620; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320.

1917 (3 1/2 Ton)—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 539C-532; (AA & BB) 440-4320; (DD & EE) 316-312.

1917 (U-5 Ton)—Tim. Brgs.: (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA) 439-4320; (BB) 440-4320; (DD & EE) 415-412.

1919-20 (L)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (F) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (N) 1509-D; (O) 205; (P) 337; (Q) 200; (BB) Tim, 335; (CC) 257; (DD & EE) 316; (GG, KK & LL) Spec.

1919 (C)—Tim. Brgs.: (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359E-6320E; (O) 205; (P) 208DR; (Q) 209; (AA) 439; (BB) 435; (CC) 335; (DD & EE) 415; (GG, KK & LL) Spec.

1919 (C)—Tim. Brgs.: (A) 4559-452; (B) 3311-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5758E-5521; (N) 1509-D; (O) 205; (P) 337; (Q) 209; (BB, DD & EE) 335; (CC) 257; (GG, KK & LL) Spec.

1919 (M)—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 539E-532; (K) 6357E-6320E; (N) 1509-D; (O) 205; (P) 337; (Q) 209; (BB, DD & EE) 335; (C-1) 257; (GG, KK & LL) Spec.

1920-21 (C-1)—Tim. Brgs.: (D, G & H) 780-772; (E) 6552-6521; (J) 6375-6323; (K) 6455-6422; (O) 205; (P) 208DR; (Q) 209; (AA) 439; (BB) 435; (CC) 335; (DD & EE) 415; (GG, KK & LL) Spec.

1920-21 (H-1)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5758E-5521; (N) 1509-D; (O) 205; (P) 337; (Q) 209; (BB) 337; (CC) 306; (DD & EE) 339; (GG, KK & LL) Spec.

1920-21 (M-2)—Tim. Brgs.: (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375-6323; (N) 1509-D; (O) 205; (P & BB) 337; (Q) 209; (C) 306; (DD & EE) 415; (GG, KK & LL) Spec.

1921 (L-2)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (F) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (N) 1509-D; (O) 205; (P) 344; (Q) 209; (BB) 339; (CC) 308; (DD & EE) 319; (GG, KK & LL) Spec.

**MACK—1917-18-19 (AB 1, 1 1/2 & 2 Ton Worm Drive)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D) 4553-4520; (E) 3762-3720; (G) 557-552; (H) 456-454; (J & K) 539-532; (N) SK F, 407AJ; (O) Schafer, 305; (Q) 209 RJ; (AA) 257; (BB, DD & EE) 335-3320; (CC) 337-3320; (GG) 1550-1530.

1917-18-19 (AB 1, 1 1/2 & 2 Ton Chain Drive)—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D) 5550-5520; (E) 5355-5320; (G & H) 395-3920; (J) 4364-4320; (K) 2753-2720; (O) Schafer 305; (Q) 209 RT; (AA) 257; (BB, DD & EE) 335-3320; (CC) 337-3320; (GG) 1550-1530; (Jackshaft) Schafer, 308.

1917-18-19 (AC 3 1/2, 5 1/2 & 7 1/2 Ton Chain Drive)—Tim. Brgs.: (A) 6356-6321; (B) 5355-5320; (D) 6356-6321 or 6550-6521; (E) 5355-5320 or 6354-6321; (G & H) 5557-5520; (J & K) 3360-3320; (Q) SK F, 2215; (Engine Cross Shaft) 235-2330; (Master Gear, large) 539-532; (Master Gear, small) 455-4520; (GG) 1550-1530; (Jack Shaft Ball Brg.) Schafer, 1410.

5355-5320; (FF) 3362-3320; (GG) 1550-1530; (B) Tim, 3556-3520; (E) 4361-4320; (Jack Shaft—R & L) DWF, 308; (G & H) 395-3920; (J) 2755-2720; (K) 4364-4320; (O) DWF, 305; (Q) 209RT; (DD, EE & Spline Shaft, rear) 335-3320; (AA) 337-3320; (CC) 257; (GG) Hy, 27097; (Cross Shaft, R & L) 235-2320.

1919 (AB-2, Chain)—(A) Tim, 4550-4520; (B) Tim, 3556-3520; (D) Tim, 5550-5520; (E) Tim, 5355-5320; (Jack Shaft—R & L) DWF, 308; (G & H)



# Strom

## BEARINGS

### Meet Every Ball Bearing Requirement

STROM BEARINGS are made for the purpose of giving maximum ball bearing service under the most exacting conditions. Every step in their manufacture is directed toward this end.

They are correctly designed, made of the highest grade materials, and heat-treated by the most modern and approved methods.

They are conscientiously manufactured in a wide range of types and sizes by expert workmen, and are rigidly inspected after every operation.

A staff of Strom engineers will be glad to give you the benefit of their experience in the selection of the type and size of bearing for your particular installation.

**U. S. BALL BEARING MFG. CO.**

(Conrad Patent Licensee)

4500 Palmer Street

CHICAGO, ILLINOIS



Double-row, maximum type, radial bearing



Double-acting, self-aligning thrust bearing. 2100 Series



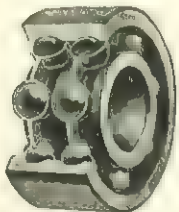
Double-acting, self-aligning thrust bearing with leveling washers. 2100-U Series



Single-acting, self-aligning thrust bearing, leveling washer. 1100-U Series



Double-acting, thrust bearing, flat seats. 2100-F Series



Double-row, deep-groove Conrad type, radial bearing



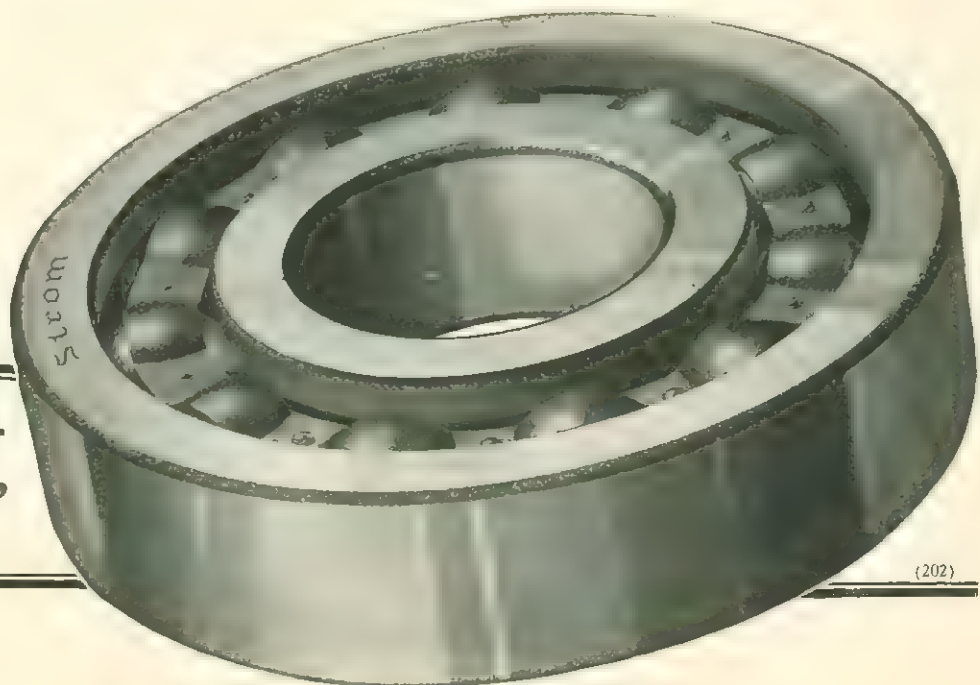
Single-row, deep-groove Conrad type, radial bearing



Angular contact bearing — combination radial and thrust



Single-row, maximum type, radial bearing



—used "Wherever  
a Shaft Turns"



**MADISON**—1916-17 (6-40)—(F) 310; (G & H) 210; (J) 306; (K) 406; (O) 205; (AA) 208; (BB) 207; (DD & EE) 305.  
**1916 (Madison)**—(F) 310; (G & H) 210; (J) 306; (K) 406; (O) 205; (AA) 208; (BB) 307.  
**1917-18**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 455-4520; (E) 375-3720; (G) 456-454; (H) 559-552; (J) 539-4320; (K) 539-532.

**MAIBOHM**—1917 (Mod. A)—(D & E) Br, 208AX; (F) Hy, 16076 or 16395; (G & H) Hy, 26269 or 26253.  
**1918 (Mod. A)**—(F) Hy, 16395; (G & H) Hy, 26253.  
**1918-19 (Mod. A)**—(G & H)—Hy, 26216.  
**1919-20 (Mod. B)**—(A) Tim, 317-312; (B) Tim, 235-2320; (D & E) Tim, 277-274; (G & H) Hy, 26216; (GG) Hy, 29095.

**MAIS**—1914-15 (1-1½ Ton)—Tim. Brgs.: (A) 4364-4320; (B) 3364-3320; (C) 5354-5320; (D) 4553-4520; (E) 5355-5320; (KK) 255-2520.

**MAPLE LEAF**—1920-21 (AA-2, BB-3 Ton)—(A) Bk, N310; (B) Bk, N308.  
**1920-21 (CC-4, DD-5 Ton)**—(A) Bk, N312; (B) Bk, N311.

**MARATHON**—1920—Tim. Brgs.: (A) 317-312; (B) 235-2320; (D & E) 277-274.

**MARGNETTE**—(A) 309; (B) 307; (F) 311; (G & H) 212; (J) 308; (K) 309; (AA) 309; (BB) 310; (DD & EE) 307.

**MARION**—1914-15 (50-50H)—(AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.  
**1915**—(J) 0208; (K) 0407.  
**1916 (Mod. H)**—(F) Hy, 16779; (G & H) Hy, 26252.

**1916-17-18 (8, 6-40, 6-60)**—(F) Hy, 16779; (G & H) Hy, 26056.

**MARION HANDLEY**—1917 (5 Pass.)—(A) 305; (B) 308; (G) 0307; (H) 0407; (J) Tim, 344-333; (K) Tim, 441-434; (O) 205; (AA) 208; (BB) 307; (CC) 304; (DD & EE) 305.  
**1917 (7 Pass.)**—(J) Tim, 339-3320; (K) Tim, 441-434.  
**1917 (A Handley)**—(A) 305; (B) 308; (J) 0208; (K) 0407; (O) 205; (AA) 208; (BB) 307; (DD & EE) 305.  
**1919 (Sedan)**—(A) Gur, 308; (B) Gur, 305; (F) Hy, 16681; (G & H) Hy, 26056; (I) Salis, 6187.

**MARMON**—1914-15-16 (41-61)—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 457-454; (H) 559-552; (J) 439-4320; (K) 539-532.  
**1914 (6-48)**—Tim. Brgs.: (A) 435-4320; (B) 435-4320; (D & E) 456-4520; (AA, BB, DD & EE) 335-3320.

**1915 (32)**—(F) 311; (AA) 310; (AA) 408; (DD & EE) 406.  
**1915 (41)**—(O) 0206; (Q) 0210; (AA) 309; (BB) 308; (DD & EE) 406.  
**1915 (48)**—(O) 0206; (Q) 0211; (AA) 310; (BB) 408; (DD & EE) 406.  
**1916 (6-34)**—(A) Tim, 337-3320; Tim, 415-412 after first 500 cars; (B) Tim, 236-2330; (F) 311; (G & H) DR 212; Hy, 26056; (K) 310; (AA) 209; Hy, 17026; (BB) Hy, 27125; (FF) Hy, 16828; (HH) 1305.  
**1917-18-19 (34)**—(A) Tim, 415-412; (B) Tim, 236-2330; (F) 311; (G) DR 212; Hy, 26056; (H) 26056 Spec.; (K) 310; (AA) 209; Hy, 17026; (BB) Hy, 17026; (FF) Hy, 16828; (HH) 305.  
**1920 (34)**—(A) Tim, 415-412; (B) Tim, 3620-2687; (F) 311DR; (G) 212DR; (H) Hy, 26056; (K) 310; (P) 206DR; (AA & BB) Hy, 27026; (FF) Hy, 16828; (KK) Hy, 16945; (LL) Tim, 2620-2690.

**MARTIN "ATLAS"**—1914 (Mod. B)—Tim. Brgs.: (A) 3750-3720; (B & E) 3360-3320; (C) 341-3320; (D) 4558-4520; (G & H) 375-3720.  
**1915 (Mod. A)**—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6556-6520; (E) 5355-5320; (G) 375-3720; (H) 395-3920.  
**1915 (Mod. B)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5563-5520; (E) 4365-4320; (G & H) 375-3720.  
**1916-17-18 (½ Ton)**—(D & E) Bower, 209AL; (AA) Hy, 27797; (BB) Hy, 27899; (DD & EE) Hy, 26972; (FF) Hy, 26956.  
**1917 (C Fire Truck)**—Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (C) 341B-3320; (D) 5563-5520; (E) 4365-4320; (G & H) 375-3720; (J) 256-2520; (K) 415-412; (AA) 337-3320; (BB), 440-4320; (DD & EE) 335-3320.  
**1919-20 (¾ Ton)**—(A) Bk, N307-107; (B) Bk, N305-105; (D & E) Bk, 355-35; (G & H) Bk, N209-09; (J) Bk, 321-31; (K) Bk, 417-41; (AA) Hy, 27797; (BB) Hy, 27899; (CC & FF) Hy, 26956.

**MASON**—1914-15—(O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.

**MASTER**—1919 (J1, JW, 1½ Ton) % (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

**1919 (MW, 2 Ton)**—(O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306.  
**1919 (M, 2 Ton)**—(O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.  
**1920 (A & AL)**—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G) 5756-5720; (H) 559-552; (J) 6359-6320.  
**1920 (B & BL)**—Tim. Brgs.: (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359E-6320; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412; (GG) Hy, 29097.  
**1920 (JW)**—Tim. Brgs.: (A) 4364-4320; (B) 3161-3120; (D) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (GG) Hy, 29097.  
**1920 (WA, 3½ Ton)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (D & E) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532.  
**1920 (W & WL)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (GG) Hy, 29097.

**MATHESON**—1909-10-11 (M-17-24)—(A) Tim, 3357-3320; (B) Tim, 3151-3120.  
**1910 (Mod. 18)**—(D) 310; (E) 209; (G) 209; (H) 311; (O) 208; (AA) 308; (BB & DD) 1405; (CC & EE) 305.

**MAXWELL**—1914-15-16 (25)—(F) Hy, 16714; (G & H) Hy, 26710; (AA) Hy, 16553.  
**4320; (AA) Hy, 16553.**  
**1917 (1 Ton)**—Tim. Brgs.: (A) 337-3320; (B) 236-2320; (E) 4550-4520; (J & K) 440-4320.  
**1917-18-19 (25)**—(F) Hy, 16714; (G & H) Hy, 26227; (AA) Hy, 16553.  
**1918 (25 Lt. Del)**—(F) Hy, 16714; (G & H) Hy, 26227; (K) Hy, 26621; (AA) Hy, 16553.  
**1919 (25)**—(F) Hy, 16658; (G & H) Hy, 26269; (AA) Hy, 16553; (GG) Hy, 26245.  
**1919 (1 Ton)**—Tim. Brgs.: (A) 337-3320; (B) 236-2320; (D) 4550-4520; (J) 440-4320; (AA) Hy, 16553; (GG) Hy, 26245.  
**1920 (1, 1½ Ton)**—Tim. Brgs.: (A) 337-3320; (B) 236-2320; (D) 4550-4520; (J & K) 440-4320; (BB) Hy, 16833; (GG) Hy, 26243.  
**1920 25** (D&E) Hy, 16658; (G&H) Hy, 26269; (AA) Hy, 16553; (GG) Hy, 26245.

**MENOMINEE**—1915 (Mod. A-C)—(AA) Tim, 277-274; (B) Tim, 339-333.  
**1916 (Truck)**—Tim. Brgs.: (D) 462-4520; (E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532.

**1916 (Mod. D)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.  
**1916 (Mod. E-W)**—Tim. Brgs.: (D) 462-4520; (E) 375-3720; (G) 539C-552; (H) 456C-454; (J & K) 539C-532.  
**1917 E-W ¾ Ton**—Tim. Brgs.: (D) 462-4520; (E) 375-3720; (G) 456C-454; (H) 559C-552; (J & K) 539-532; (AA) 277-274; (BB) 339-333.  
**1917 (F-W 1 Ton)**—Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.

**1917 (H 1½ Ton)**—Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
**1917 (D 2 Ton)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
**1917 (G 1½ Ton)**—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (EE) 5755-5720; (G & H) 5756-5720; (J & K) 539-532.  
**1919-20 (HT 1 Ton)**—(A) Tim, 439-320; (B) 3191-3120; (D) 311DR; (G & H) 5212; (J & K) 5407; (N) 308; (O) 205; (P) 308.  
**1919-20 (H 1½ Ton)**—(A) Tim, 435-4320; (B) Tim, 3191-3120; (D) 311DR; (G & H) 5212; (J & K) 5407-D; (N) 308; (O) 205; (P) 308.

**1919-20 (D 2 Ton)**—(A) Tim, 4554-4520; (B) Tim, 2753-2720; (D) 5313DR; (G & H) 5213; (J) 309; (K) 5409-D; (N) 308; (O) 205; (P) 308.  
**1919-20 (G 3½ Ton)**—(A) Tim, 4553-4520; (B) Tim, 4365-4320; (D) 317DR; (G & H) 5215; (J) 311; (K) 5411-D; (O) 205; (P) 308.  
**1919-20 (J 3½ Ton)**—(A) Tim, 5557-5520; (B) Tim, 5355-5320; (D) 319DR; (G & H) 220; (J) 411; (K) 412DR; (O) 205; (P) 308.

**MERCER**—(Mod. 35A, B, D, G, H, J, K)—(A & D) SKF, 2310; (E) SKF, 2210; (O) 205; (AA) SKF, 2206; (BB) SKF, 2308; (CC) 307 & 308; (DD & EE) 308; (GG) 202 & 203.  
**1916-17-18 (22-72-73-74)**—(D) 310; (E) 210; (O) 206; (P) DR, 207; (R) 307; (AA) 308; (BB) DR, 308; (CC) DR, 206; (DD & EE) 308.  
**1919-20-21**—(A) Bk, N308; (B) Bk, 319-32; (G & H) 539; (J) 447; (K) 413.  
**1920 (Series 5)**—(AA) Hy, 16413-16412; (BB) Hy, 26615; (CC) Hy, 02460; (DD & EE) Hy, 26414.

**METEOR**—1915 (Mod. 42)—(K) 308; (AA) 308; (BB) 307; (CC) 304; (DD & EE) 305.  
**1915 (Pleas.)**—Tim. Brgs.: (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375-3720; (J) 255-2530; (K) 417-412.  
**1916-17 (Hearse 75-80)**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532.  
**1919-20-21 (A) Bk, 335; (B & C) Bk, 236; (D & E) Bk, 355; (G & H) Bk, 375; (J) Bk, 337; (K) Bk, 435; (O) 205; (P, AA, BB) 308; (Q, DD & EE) 307; (CC) 305; (GG & KK) Spec.**  
**1919**—(A) Bk, 418; (B) Bk, 258; (D & E) Bk, 375; (J) Bk, 335; (K) Bk, 417.  
**1920**—(A) Bk, 418; (B) Bk, 257; (D, EG & H) Bk, 375; (J) Bk, 335; (K) Bk, 449.

**METZ**—1920 (All Mod.)—Tim. Brgs.: (A) 317-312; (B) 2687-2620; (D) 415T-412A; (G & H) 359S-3520; (J) 2785-2720; (K) 3381-3320.

**MICHIGAN HEARSE**—1918 (1-A)—Tim. Brgs.: (A) 415-412; (B) 316-312; (D) 375-3720; (E) 462-4520; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.  
**1918 (1-B)**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453.  
**1919-20 (4,000)**—Tim. Brgs.: (A) 415-412; (B) 316-312; (F) 435T-4320; (G & H) 375T-3720; (J & K) 4365-4320.  
**1920 (1012)**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 539TE-532; (G & H) 397-3920; (J) 444-432; (K) 456-453.

**MICHIGAN TRAILER**—1917 (AB 1 Ton)—(A) Tim, 3355-3320; (B) Tim, 3154-3210.  
**1917 (C-D 1½ Ton)**—(A) Tim, 4550-4520; (B) Tim, 4353-4320.  
**1917 (E 2 Ton)**—Tim. Brgs.: (A & D) 4550-4520; (B & E) 4353-4320.  
**1917 (F 3½ Ton)**—(A & D) Tim, 5550-5520; (B & E) Tim, 5351-5320.  
**1917 (G 5 Ton)**—(A & D) Tim, 5556-5520; (B & E) Tim, 5351-5320.

**MILBURN**—1919-20-21—(G & H) Bk, 355.

**MILLER, CO. AJ-1917 (A-Mod.)**—(A) Br, 308AXL; (B) Br, 305AXL; (F) Hy, 16681; (G & H) Hy, 26056; (J) 208; (K) 407.

**MILWAUKEE**—1916 (3 Ton)—Tim. Brgs.: (A & D) 6451-6420; (B & E) 5551-5520; (G & H) 475-473.

**MITCHELL**—1915 (4 Cyl.)—(A) Tim, 344-333; (B) Tim, 237-233; (J) DR, 307; (K) Hy, (BB) 210; (CC) 307.

**1915 (B-35-45)**—(A) Tim, 344-333; (B) Tim, 237-233; (J) DR, 307; (K) DR, 304; (AA) 308; (BB) DR, 210; (CC) 307.  
**1915 (Six)**—(G & H) Hy, 16041; (S) 308; (AA) 1308; (BB) 210; Hy, 16354.  
**1916 (Six)**—(F) Hy, 26622; (G & H) Hy, 26491; (K) DR, 307; (S) 209; (AA) DR, 209; (CC) 209; (DD & EE) Hy, 17795.

**1916-17 (Mod. C-42)**—(A) Tim, 344-333; (B) Tim, 237-233; (F) Hy, 26622; (G & H) Hy, 26491; (J) 307; (A) 209; (BB) 209; (DD & EE) Hy, 17795; (GG) Hy, 26482.  
**1917 (D-40)**—(F) Hy, 16779; (G & H) Hy, 26056; (J) 207; (K) 408 on cars 70,000 to 81,700; (J) 307; (K) 207 on cars 81,701 up; (AA) 209; (BB) 209; (DD & EE) Hy, 17795.  
**1918 (Mod. C-42)**—(A) Tim, 344-333; (B) Tim, 237-233; (F) Hy, 26622; (G & H) Hy, 26491; (J) Gur 307RT; (K) Gur, 407; (AA) 209; (BB) 209; (DD & EE) Hy, 17795; (GG) Hy, 26482.

**1918 (Mod. D-40)**—(A) Tim, 344-333; (B) Tim, 237-233; (F) Hy, 16779; (G & H) Hy, 26056; (J) 1407; (K) 307; (AA) 209; (BB) 209; (DD & EE) Hy, 17795; (GG) Hy, 26482.  
**1919 (Mod. E-40, E-42)**—(A) Tim, 344-333; (B) Tim, 237-233; (F) Hy, 26622; (G & H) Hy, 26491; (J) Gur, 307RT; (K) Gur, 407; (AA) 209; (BB) 209; (DD & EE) Hy, 17795; (GG) Hy, 26482.

**1919 (E-40, 42)**—(A) Tim, 344-333; (B) Tim, 237-233; (D & E) Hy, 26622; (G & H) Hy, 26491; (DD & EE) 17795; (GG) Hy, 26482.  
**1919 (D-40, C-42)**—(A) Tim, 344-333; (B) Tim, 237-233.

**1920 (F-40)**—(A) Tim, 344-333; (B) Tim, 237-233; (D & E) Hy, 26622; (G & H) Hy, 26491; (J) Hy, 610304; (AA) 209DR; (BB) 306; (CC) Hy, 26972; (DD & EE) Hy, 17795; (GG) Hy, 26482.

**MODERN**—1916 (V), 1917 (Mod. C)—Tim. Brgs.: (A) 3750-3720; (B) 3360-3320; (D) 455-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.

**1916-17 (Lt. Del. 15)**—Tim. Brgs.: (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 462-4520; (E) 375-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.  
**1914-15 (¾-1 Ton)**—(AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.  
**1917 (50 2 Ton)**—Tim. Brgs.: (A) Hy, 26557; (BB) Hy, 26697; (DD & EE) Hy, 16698.

**1917 (Mod. B-N)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

**MOGUL**—1915-16 (L-W)—Tim. Brgs.: (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

**1915-16 (L-C)**—Tim. Brgs.: (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.

**1915-16 (Mod. T)**—Tim. Brgs.: (D) 6552-6521; (E) 5756-5720; (G & H) 5756-5720; (J & K) 559C-552.

**MOHAWK**—1917 (D & E) Hy, 16018; (G & H) Hy, 26063.

**MOHAWK KNIGHT**—1915% (F) 312; (K) 310; (AA) 307; (BB) 308; (DD & EE) 306.

**1916 (6-50)**—(BB) 308.  
**1915 (40-50)**—(D & E) 312 DR; (J) 308 DR; (K) 310; (CC) 305 DR.  
**(Mod. M-40**



(Q) 305.



## O KLAND—Continued

1916 (32)—(F) Hy, 26394; (G & H) Hy, 26223; (AA) Hy, 17024; (J) 306; (K) 307; Spec bore 1 811; (BB) 306.  
 1916 (38)—(F) Hy, 16891; (G & H) Hy, 26062; (AA) Hy, 17798; (J) 306; (K) 406; (Q) 0305; (BB) 307.  
 1916-17 (50)—(F) Hy, 16692; (G) Hy, 26056; (H) Hy, 26083; (J) 315; (K) Tim. 418.  
 (O) DR 302; (AA) 212; (BB) 307; (GG) 204.  
 1917 (34)—(F) Hy, 26394; (G & H) Hy, 26223; (AA) Hy, 17024; (J) 306; (K) 307, Spec. bore 1 811; (BB) 306.  
 1918-19 (34-B)—(F) Hy, 26394; (G & H) Hy, 26223; (J) DR 306; (K) 307; (S) 210; (BB) 307.  
 1920-21 (34-C)—(K) 307 Spec.; (S) 210; (BB) 307.

OGDEN 1920 (E) (AA & BB) Tim, 337-3320; (DD & EE) Tim, 319-313

O. K. TRUCK 1920-21 (K-1½ Ton)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (F) 311DR; (G & H) 213; (J & K) 407; (N) 308; (O) 205; (AA) 208; (BB) 307; (CC) 304; (DD) 305; (EE) 306.  
 1920-21 (L-2½ Ton) (A) Tim, 4554-4520; (B) Tim, 3360-3320; (F) 315DR; (G & H) 214; (J) 310; (K) 410; (N) 311; (O) 205; (AA & BB) 308; (CC) 305; (DD & EE) 306.  
 1920-21 (M, M2-3½ Ton) (A) Tim, 4553-4520; (B) 5554-5520; (F) 218 & 317D; (G & H) 215; (J) 311; (K) 411; (O) 205; (AA) 308-310; (BB) 310; (CC) 305; (DD) 307; (EE) 308.

OLD HICKORY—1916 (30-W)—Tim. Brgs.; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.  
 1916-17-18 (1000 lbs., 1200 lbs., Del., M ¾ Ton)—(F) Hy, 16681; (G & H) Hy, 26056.  
 1919-20 (M-¾ Ton)—(FF) Hy, 16950.

OLD RELIABLE—1916 (2 Ton)—Tim. Brgs.; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257.

1916 (3 Ton)—Tim. Brgs.; (AA & BB) 357-353; (CC) 306; (DD & EE) 339-333.  
 1916 (4 Ton)—Tim. Brgs.; (AA & BB) 440-4320; (CC) 338; (DD & EE) 415-412.  
 1917-18 (3 Ton)—(D) Bower, 317NDT.  
 1919 (1½ Ton)—(A) Bk, N310DR; (B) Bk, N308DR & 309DR; (AA) 337-3320; (BB, DD & EE) 335-3320.  
 1919 (2½, 3 Ton)—(A) Bk, N312DR; (B) Bk, N311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 413DR; (O) 205; (Q) 209RT.  
 1919 (2 Ton Chain)—(A) Bk, N312DR; (B) Bk, N311DR; (D) Bk, N313; (E) Bk, N312.  
 1919 (4 Ton Chain)—(A) Bk, N315DR; (B) Bk, N314DR; (D) Bk, N316; (E) Bk, N315.  
 1919 (5 Ton)—(A) 312DR; (B) 314DR; (F) 319DR; (G & H) 219; (J) 409; (K) 410; (O) 205; (Q) 209RT.  
 1919 (7 Ton Chain)—(A) Bk, N315DR; (B) Bk, N314DR; (D) 6552-6521; (E) 6452-6420; (G & H) 813DR; (Sprocket Shaft) 217; (Q) 209RT; (AA) 312; (BB) 411; (CC) 308; (DD) 310; (EE) 409.

OLDSMOBILE—1914-15 (54-55)—(A) Tim, 438-4320; (B) Tim, 317-312; (F) 313; (G & H) 312; (J) 307; (K) 310; (O) 0208; (AA) 212; (BB) 307; (DD & EE) 306.  
 1915 (First 200 cars 42)—(A) Tim, 339-333; (B) Tim, 237-233; (F) Hy, 16691; (G & H) Hy, 26062; (J) 1406; (K) 306; (Q) 1305; (AA) Hy, 17798; (BB) 307.  
 1915 (42)—Tim. Brgs.; (A) 275-274; (B) 237-233; (G & H) 375-3720.  
 1915 (53)—(F) 312; (G & H) 212; (J) 307; (K) 310; (AA) 212; (BB) 307; (DD & EE) 306.  
 \*1916-17 (43-44 M-45, 8-Cyl.)—(A) Tim, 275-274; (B) Tim, 237-233; (F) 310; (G & H) Tim, 366-363, ND 210; (J) 306; (K) 406; (AA) Hy, 17798; (BB) 307.  
 1917 (M-45, 4-8)—Tim. Brgs.; (A) 275-274; (B) 237-233; (G & H) 375-3720; (G & H) 365-362 on first 1000 cars; (AA) Hy, 17798.  
 1917 (Little 6)—Tim. Brgs.; (A) 259-2520; (B) 1751-1730; (G & H) 366-363; (G & H) 375-3720, used after first 1000 cars; (AA) Hy, 17798.  
 1918 (M-37)—(F) 309; (J) 406; (K) 306; (AA) Hy, 17024.  
 1918 (M-54-A)—(F) 311; (J) 407; (K) 307.  
 1919 (45)—(AA) Hy, 17798.  
 1918 (45A-8 Cyl.)—(A) Tim, 337-3320; (B) Tim, 238-2320; (G & H) 377-3720; (FF) Gy, 16820.

1919 (37-A)—(F) 309DR; (J & BB) 306DR; (K) 406; (AA) Hy, 17024; (CC) Hy, 26972.  
 1919-20 (45-A, B)—(F) 311DR; (J & BB) 307DR; (K) 407; (AA) 210 & Hy, 17798; (CC) Hy, 16820.  
 1920 (37-A, A)—(F) 309DR; (J & BB) 306DR; (K) 406; (AA) Hy, 17024; (CC) Hy, 26972.  
 1919 (T-Truck Economy)—(A) Tim, 3381-3320; (B) Tim, 2382-2320; (BB) 307; (CC) 210.  
 1920 (1 Ton)—Tim. Brgs.; (A) 3381-3320; (B) 2687-2620; (D) 420-413; (E) 319-313; (G) 276-2720; (J) 275-2720; (K) 335-3320.  
 1920 (4 Cyl. Trucks)—Tim. Brgs.; (A) 3381-3320; (B) 2382-2320; (D) 420-413; (E) 319-313; (G) 276-2720; (J) 275-2720; (K) 335-3320.

OLYMPIAN—1917—(D & E) Bower, 208A; (G & H) Hy, 26216; (J) 206; (K) 306; (AA) 207; (BB) 305.

1919 (45)—(D & E) Br, 208AX; (G & H) Hy, 26216; (O) 302; (AA) 207; (BB) 306.

ONEIDA—1920 (A-9)—(A) Tim, 435-4320; (B) Tim, 3191-3120; (F) 311DR; (G & H) 212; (J & K) 407; (P) 208; (BB) 307; (CC) 304; (DD) 305; (EE) 306.

1920 (B-9)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (F) 311DR; (G & H) 213; (J) 407; (K) 407-2; (P) 208; (AA) 208-307; (BB) 307; (CC) 304; (DD) 305; (EE) 306.

1920 (C-9)—(A) Tim, 4554-4520; (B) 3360-3320; (F) 315DR; (G & H) 214; (J) 310; (K) 410-2; (AA) 307-308; (BB) 308; (DD & EE) 306.

1920 (D-9 Tim. Axle 6652)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359E-6320C.

1920 (D-9 Tim. Axle 6660)—Tim. Brgs.; (A) 4553-4520; (B) 4366-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6375-6323.

1920 (D-9 Fuller Trans. & Rear Axle)—(F) 317DR; (G & H) 215; (J) 311; (K) 411 (2); (P) 208; (AA) 307-308; (BB) 308; (DD & EE) 306.

1920 (E-9 Tim. Axle 6752)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320.

1920 (E-9 Tim. Axle 6760)—Tim. Brgs.; (A) 5557-5520; (B) 5355-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 6375-6323; (K) 6455E-6422.

1920 (E-9 Fuller Trans. Rear Axle)—(F) 319DR; (G & H) 220; (J) 411; (K) 412 (2); (P) 208; (AA) 308-310; (BB) 310; (CC) 305; (DD) 307; (EE) 308.

1920 (E-9 Cotta-Trans.)—(AA) 210-310; (BB) 310; (DD) 307; (EE) 308.

OSHKOSH—1919-20 (A, AA, 2 Ton)—(A, B, D, E, G & H) Bk, N212; (C) 3158; (O) 205; (AA) Tim, 344-333; (BB) 339-333; (DD & EE) 319-313; (GG) Hy, 29097.

1920-21 (B-BB)—(A, B, E, G & H) Bk, N212; (D) Bk, N312; (C) 3158.

OVERLAND—1916 (83)—(D & E) 311; (K) DR 407; (DD & EE) 305.  
 1916 (75)—(D & E) 308; (J) DR 306; (BB) 208; (DD & EE) Hy, 26972.  
 1915 (82), 1916 (86)—(K) DR 307; (BB) 210; (C) 208; (DD & EE) 306.  
 1917 (90)—(D & E) 309; (J) DR 306; (BB) 208; (DD & EE) Hy, 26972.

(Mod. 69)—(AA) 208; (BB) 307; (DD & EE) 305.  
 (Mod. 71)—(G & H) Tim, 375-3720; (AA) 209; (BB) 307; (CC) 304 (DD & EE) 306.  
 (Mod. 79)—(F) Hy, 16779; (G & H) Hy, 26056; (AA) 208; (BB) 307; (DD & EE) 305; (GG) ND 3.

(Mod. 80)—(F) Hy, 16779; (G & H) Hy, 26056; (AA) 208; (BB) 307; (CC) 208; (GG) ND 3.  
 (Mod. 81)—(F) Hy, 16779; (G & H) Hy, 26056; (AA) 208; (BB) 307; (DD & EE) 305.  
 (6-82)—(G & H) Tim, 375-3720; (AA) 208; (BB) 210; (DD & EE) 306.

1918 (88-8) (K & BB) 408DR; (AA) 210.  
 1918 (85-4) (F) 310, (K & BB) 307DR; (AA) 208DR.  
 1918 (89-6)—(F) 311; (K) 407DR; (AA) 208; (BB) 210.  
 1919 (4)—(A) Tim, 256-2520; (B) Tim, 1751-1730; (F) 308; (G & H) Tim, 358-354; (J) 406DR; (O) 302; (AA) 208; (BB) 307.

1919 (88-4) (F) 312DR; (AA) 210; (BB) 408DR.  
 1919 (90-B)—(A) Tim, 256-2520; (B) Tim, 1751-1730; (F) 309; (G & H) Tim, 277-274; (K) 306DR; (AA) 208; (BB) 306DR; (CC) Hy, 16950; (DD & EE) Hy, 26972.  
 1919 (90-R)—(A) Tim, 1985-1930; (B) 1351-1330; (G & H) Tim, 277-274.  
 1919 (88-4, 88-B, 88-S)—(A) Tim, 335-3320; (B) 235-2330; (D & E) Tim, 365-363; (G & H) Tim, 385-383.  
 1919 (89)—(A) Tim, 317-312; (B) Tim, 235-2330; (G & H) Tim, 365-363.

OWEN MAGNETIC 1916-17 (Mod. G-A)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

PACKARD—1909-10-11-12 (UB, UC, UD, UEF, REF)—(A) Tim, 3750-3720; (B) Tim, 3154-3120; (G & H) D.W.F. 10U; (O) 208; (O) Mod UB uses F. & S. BE 25; (DD & EE) D.W.F. 5U; (DD & EE) Mod. REF. 308 & 309; (GG) 301.

1909-10-11-12-13 (NA, NB, NC, NEF, 13-48)—(A) Tim, 3358-3320; (B) 3154-3120; (G & H) D.W.F. 9U; (G & H) Mod. 13-48 D.W.F. 10U; (O) 208; (O) Mod NA. uses F. & S. BE 25; (DD) D.W.F. 5U Mod. 13-48 uses 308; (EE) D.W.F. 4U Mod. 13-48 uses 309; (GG) 301.

1909-10-12-13 (3A, TC, TD, ATD)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 6451-6420; (E) Tim, 6354-6321; (G & H) D.W.F. 10U; (O) Mod 3A & ATD use 208; Mod. TC & TD use F. & S. BE 25; (DD & EE) D.W.F. 5U; (GG) 301 & 203.

1912-13-14 (Mod. AT, N)—(G & H) D.W.F. 10U; (O) 208; (DD & EE) D.W.F. 5U; (GG) 301 & 203.

1912-13-14 (1½ Ton 2-B)—(A) Tim, 4554-4520; (B) Tim, 4361-4320; (D) Tim, 5557-5520; (E) Tim, 5351-5320; (G & H) D.W.F. 10U; (O) 208; (DD & EE) D.W.F. 5U; (GG) 301-203.

1912-13-14 (3 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 6451-6420; (E) 6354-6321.

1913-14-15 (T 13-30)—(A) Tim, 436-4320; (B) Tim, 316-312; (G & H) D.W.F. 10U; (O) 208; (EE) D.W.F. 9U; (GG) 202.

1914-15 (15-48)—(A) Tim, 455-4520; (B) Tim, 3154-3120.  
 1915-16-17 (1, 1½ D)—(A) Tim, 455-4520; (B) Tim, 3154-3120; (D) Tim, 5553-5520; (E) Tim, 5554-5520; (G & H) 217; (J & K) 309; (O) 305; (DD) D.W.F. 54U & 405; (EE) D.W.F. 9U & 310; (GG) 301 & 203; (HH) D.W.F. 6305.

1915-16-17 (2-D)—(A) Tim, 4554-4520; (B) Tim, 4367-4320; (D) Tim, 5752-5720; (E) Tim, 5553-5520; (G & H) 218; (J & K) 310; (O) 305; (DD) D.W.F. 54U & 405; (EE) D.W.F. 9U & 310; (GG) 301 & 203; (HH) D.W.F. 6305.

1915-16-17 (3-D)—(A) Tim, 6358-6321; (B) Tim, 5358-5320; (D) 6553-6521; (E) 6554-6521; (G & H) 221; (J & K) 312; (O) 305; (DD) 308; (EE) 309; (GG) 301 & 203; (HH) D.W.F. 6305.

1915-16-17 (4-D)—(A) Tim, 6358-6321; (B) Tim, 5358-5320; (D) Bock, 779; (E) Tim, 6553-6521; (G & H) 222; (J & K) 313; (O) 305; (DD) 308; (EE) 309; (GG) 301 & 203; (HH) D.W.F. 6305.

1916-17 (25 Twin Six)—(A) Tim, 436-4320; (B) Tim, 316-312.  
 1916-17 (5, 6 Ton)—Tim. Brgs.; (A) 6358-6321; (B) 5358-5320; (D) 861-852; (E) 6552-6521.

1916-17 (6 Ton)—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (D) Tim, 861-852; (E) Tim, 6452-6420; (G & H) D.W.F. 10U; (O) 206; (P) 308; (DD) 308; (EE) 309; (GG) 301 & 203.

(Mod. 1, 1½-E)—(A) Tim, 455-4520; (B) Tim, 3154-3120; (D) Tim, 5553-5520; (E) Tim, 5554-5520; (G & H) 217; (J & K) 309; (O) 305; (DD) D.W.F. 6406; (EE) 407; (GG) 301 & 203; (HH) D.W.F. 6305.

(Mod. 2-E)—(A) Tim, 4554-4520; (B) Tim, 4367-4320; (D) Tim, 5752-5720; (E) Tim, 5553-5520; (G & H) 218; (J & K) 310; (O) 305; (DD) D.W.F. 6406; (EE) 407; (GG) 301 & 203; (HH) D.W.F. 6305.

(Mod. 3-E)—(A) Tim, 6358-6321; (B) Tim, 5358-5320; (D) Tim, 6553-6521; (E) Tim, 6554-6521; (G & H) 221; (J & K) 312; (O) 305; (DD) D.W.F. 6407; (EE) 408; (GG) 301 & 203; (HH) D.W.F. 6305.

(Mod. 4-E)—(A) Tim, 6358-6321; (B) Tim, 5358-5320; (D) 3½ x 1½ x 7½; (E) Tim, 6553-6521; (G & H) 222; (J & K) 313; (O) 305; (DD) D.W.F. 6407; (EE) 408; (GG) 301 & 203; (HH) D.W.F. 6305.

(Mod. 5-E)—(A) Tim, 6358-6321; (B) Tim, 5358-5320; (D) Tim, 861-852; (E) Tim, 6552-6521; (G & H) 222; (J & K) 314; (O) 205; (DD) D.V.F. 6407; (EE) 408; (GG) 301 & 203; (HH) D.W.F. 6305.

1917-18 (3-E)—(A) Tim, 436-4320; (B) Tim, 316-312; (G & H) 311; (J & K) 305; (Main Shaft Int.) 308; (BB) 309; (Main Shaft, Front) Hy, 27995; (DD & EE) 406; (GG, Front & Rear) 301-203.

1919 (ED)—(A) Tim, 6358-6320; (B) Tim, 5358-5320; (D) Tim, 6553-6521; (E) Tim, 6554-6521; (G & H) 221; (J & K) 312; (M) 2120FD; (N) 310; (O) 305; (P) 308; (Q) 12068; (Main Shaft Int. & BB) 310; (Main Shaft, Front) Hy, 27971; (DD) 407; (EE) 408; (Direct Drive Gear, Front & Rear) 308-309; (CC, Front & Rear) 301-203; (KK & LL) Hy, 24385.

1920 (EF)—(A) Tim, 6358-6320; (B) Tim, 5358-5320; (D) Tim, 861-852; (E) Tim, 6552-6521; (G & H) 222; (J & K) 314; (M) 2123 FD; (N) 310; (O) 305; (P) 308; (Q) 12068; (Main Shaft Int. & BB) 310; (Main Shaft, Front) Hy, 27971; (DD) 407; (EE) 408; (Direct Drive Gear, Front & Rear) 308-309; (CC, Front & Rear) 301-203; (KK & LL) Hy, 24385.

1920 (Single Six)—(A) Tim, 317-312; (B) Tim, 2687-2620; (G & H) Tim, 3598-3520; (J) Tim, 2785-2720; (K) Tim, 3381-3320.

PAIGE—1915-16-17-18 (6-46, 51-55)—(A) 308RT; (B) 305RT; (D & E) Hy, 16681; (G & H) Hy, 26056; (J) 307RT; (K) 407RT; (AA) 210; (BB) 306; (DD, EE & FF) Hy, 17014; (FF) Bronze ¾ I.D. x 1½ O.D. x 1½.

1915 (G-6)—(A) 0308; (B) 0305; (J) 0307; (K) 0407; (O) 205; (AA) 1210; (U) 205.  
 1916 (H-6-36)—(A) 0308; (B) 0305; (J) 0207; (K) 0407; (O) 205; (U) 205; (AA) 1210; (BB) 306; (GG) 2 No. 4.

1916-17 (6-38, 39, 40)—(A) 308RT; (B) 305RT; (D & E) Hy, 16779; (G & H) Hy, 26056; (J) 308RT; (K) 407RT; (AA) 210; (BB) 306; (DD & EE) Hy, 17014.

1917 (A) 308; (B) 306; (J) 0307; (K) 0407; (AA) 210; (BB) 306.  
 1917 (K-6)—(J) 0407; (K) 0208.

1919 (6-39, 6-55)—(DD & EE) Hy, 17014.  
 1917-18 (6-38-6-46)—(A) Bower, 308AL; (B) Bower, 305AL.

1919 (M-18)—(A) Br, 308; (B) Br, 305; (F) Hy, 16681; (G & H) Hy, 26056; (I) 86187; (J) 307; (K) 407.

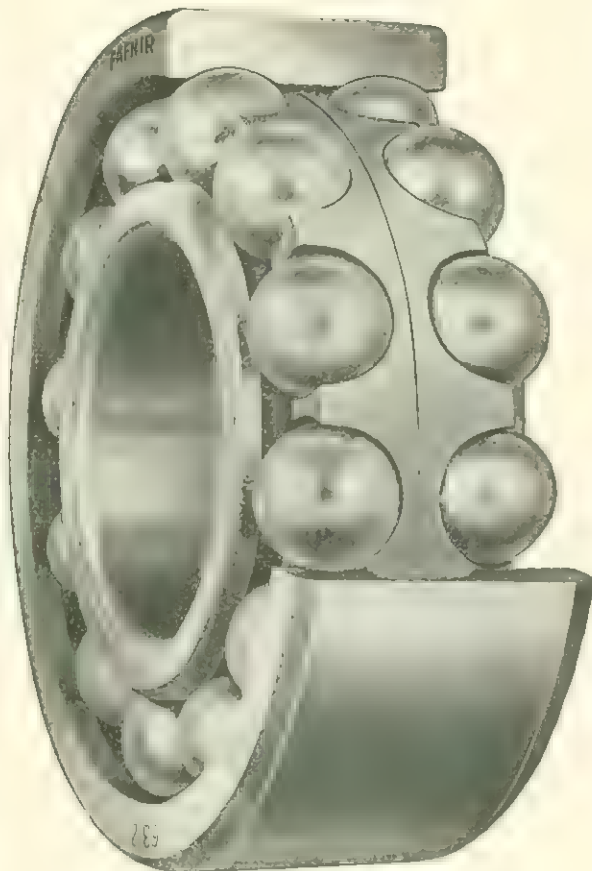
1919-20-21 (15-19)—(A) Br, 336TXL; (B) Br, 236TX; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883.

1920 (6-42)—(A) Br, 336TXL; (B) Br, 236TX; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883; (AA) Hy, 16953; (BB) 306; (DD & EE) Hy, 17104.

1920-21 (17-20-6



# FAFNIR



## Consider the Ultimate Cost

Naturally the one big thing to consider in buying replacement parts is the length of service that will be given. You will save money for the moment if you buy inferior material but it won't give you satisfactory service, and it is expensive both in time and money to have your truck in the repair shop. You pay more for a new *Fafnir* than you do for a reground, but did you ever figure accurately the cost to you of the frequent installation of reground bearings and the cost of parts which gave way owing to the failure of reground bearings.

*Fafnir Ball Bearings* are built with quality in mind and not quantity. They are made of the highest grade of high carbon chrome alloy steel that can be procured. The careful workmanship and rigid inspection after all operations insures the users of the utmost service.

You would not consider using second hand tires even though they were retreaded. You wouldn't buy a truck from a manufacturer if you knew that second hand material was being used. Manufacturers don't use reground bearings because their existence depends on their trucks giving satisfactory service.

Shouldn't you be just as discriminating?—and buy *Fafnir*.



## THE FAFNIR BEARING COMPANY

Conrad Patent Licensee

DETROIT Office: 752 David Whitney Bldg.  
CLEVELAND Office: 1016-1017 Sweetland Bldg.

New Britain, Conn.

CHICAGO Office: 537 So. Dearborn St.  
NEW YORK Office: 5 Columbus Circle.  
NEWARK Office: 271 Central Ave.



**PANHARD—1918-19 (1½ Ton)**—Tim. Brgs.; (A) 3381-3320; (B) 2382-2320; (D) 420-413; (E) 319-313.  
**1918-19 (1½ Ton)**—Tim. Brgs.; (A) 3381-3320; (B) 2382-2320; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412.  
**1918-19 (2 Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3381-3320; (G) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4368-4320.

**PARKER—1919 (F9)**—Tim. Brgs. from A-K; (A) 3762-3720; (B) 3360-3320; (D) 5756-5720; (E) 5553-5520; (G & H) 559C-552; (J & K) 539-532; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 307-308; (BB) 308; (CC) 304; (DD & EE) 306; (GG) C2785-4543 Spec.  
**1919 (J9)**—Tim. Brgs. from A-K; (A) 4553-4520; (B) 4365-4320; (D & E) 6553-6521; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C4543 Spec.  
**1919 (M9)**—Tim. Brgs. from A-K; (A) 5554-5520; (B) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C2786 Spec.  
**1919 (J9P)**—Tim. Brgs. from A-K; (A) 4553-4520; (B) 4365-4320; (D & E) 6553-6521; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C4543 Spec.  
**1920-21 (F20)**—Tim. Brgs. from A-K; (A) 3762-3720; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-552; (J & K) 539E-532; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 307-308; (BB) 308; (CC) 304; (DD & EE) 306; (GG) C2785-C4543 Spec.  
**1920-21 (J20)**—Tim. Brgs. from A-K; (A) 4553-4520; (B) 4365-4320; (D & E) 6553-6521; (G & H) 5756-5720; (J) 559-552; (K) 6375-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C4543 Spec.  
**1920-21 (M20)**—Tim. Brgs. from A-K; (A) 5554-5520; (B) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6375E-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C2786 Spec.  
**1920-21 (J20P)**—Tim. Brgs. from A-K; (A) 4553-4520; (B) 4365-4320; (D & E) 6553-6521; (G & H) 5756-5720; (J) 559-552; (K) 6375-6320; (O) 205; (P) 208DR; (Q) 209 Spec.; (AA) 211-212; (BB) 309DR; (CC) Hy, 27988; (DD & EE) 308; (GG) C2785-C4543 Spec.

**PARTIN-PALMER—(D & E) Bower, 208A; (J) 206; (K) 306; (O) 205; (CC) 207; (DD) 305.**  
**1914-15-16 (38)**—(F) Hy, 16779; (G & H) Hy, 26056; (AA) Hy, 27788; (BB) Hy, 26728; (DD & EE) Hy, 16506.  
**1915-16-17 (20)**—(AA) Hy, 26243; (BB) Hy, 26680.  
**1918—(F) Hy, 16395; (G & H) Hy, 26227.**

**PATERSON—1915 (48)**—(F) Hy, 16692; (G & H) Hy, 26484; (J) 1407; (K) 307; (Q) 0305; (AA) 212; (BB) 307; (CC) 307.  
**1916 (6-42)**—(F) Hy, 16692; (G & H) Hy, 26484; (K) 307 x 1½; (Q) 0305; (AA) Hy, 17798; (BB) 307.  
**1916-17—(F, G & H) 209; (J) 207; (K) 409; (O) 205; (AA) 208; (BB) 307.**  
**1917-18 (6-45)**—(D & E) Bower, 209A; (G) Bower 209A.  
**1919 (6-46)**—(CC) Hy, 16950; (GG) Hy, 29097.  
**1919-20-21 (A & K) Bk, N307; (B) Bk, N305; (D & E) Bk, N207; (G & H) Bk, N315.**  
**1919-20-21 (Alternate Spec.)—(D & E) 276; (G & H) Bk, N209; (J) 3191; (K) Bk, N308.**  
**1919-20-21 (6-47)**—(A) Tim, 336-3320; (B) Tim, 236-2320; (F) 310DR; (G & H) Tim, 366-363; (J) 307DR; (K) Hy, 57883; (O) 205; (AA) 209; (BB) 307.  
**1919-20-21 (G & H) Bk, 336-33; (J) Bk, N307; (K) Bk, 315-31.**  
**1919-20-21—(C) Bk, N210; (H) Bk, N212; (J) Bk, N308; (K) Bk, 3191-3110.**

**PATHFINDER—1915 (713)**—(A) 308; (B) 305; (D) 310; (E) 210; (J) 0308; (K) 0407; (Q) 205.  
**(Ser. 6 & 7)—(A) Tim, 415-412; (B) Tim, 316-312; (D) 310; (E) 210; (O) 154C; (Q) 122C.**  
**1916-17 (1B, 3B, 1C)—(Q) 205; (AA) Tim, 337-3320; (BB) Tim, 335-3320; (CC) 257; (DD & EE) 316-312.**

**PATRIOT—1919 (1½ Ton)**—(G) Hy, 26084; (H) Hy, 26085; (I) Hy, 26085; (AA) Hy, 17026; (DD & EE) Hy, 16506; (FF) Hy, 16820.  
**1919 (1½ Ton)**—(G) Hy, 26219; (AA) Hy, 57785; (DD) Hy, 17020; (EE) Hy, 16475; (GG) Hy, 29097.  
**1919 (2½ Ton)**—(GG) Hy, 29097.  
**1920 (1½ Ton)**—(A) Tim, 435-4320; (B) Tim, 3191-3120; (G) Hy, 26219; (AA) Hy, 17026; (DD) Hy, 17014; (EE) Hy, 16506; (GG) Hy, 29097.  
**1920 (2½ Ton)**—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (GG) 29097.

**PEERLESS—1912-13-14-15-16-17-18 (5 & 6 Ton)**—(A) Tim, 5550-5520; (B) Tim, 5351-5320; (C) SRB, W-290; (D) Tim, 6550-6521; (E) Tim, 6354-6320; (G & H) HB, 13U; (I) HB, 1114; (DD & EE) HB, 408.  
**1915 (Mds. 54 & 55)**—Tim. Brgs.; (A) 337-3320; (B) 236-2320; (D & E) 439T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 277-274; (BB) 339-333; (DD & EE) Rh 306A.  
**1915 (48-6)**—(A) Tim, 3363-3320; (B) Tim, 3154-3120; (C) HB, VI; (D) RBF, 110C; (E) RBF, 1166P; (G) Rh, 101C; (H) Rh, 814A; (J) Rh, 109C; (K) Rh, 307A; (AA) Rh, 109C; (BB) Rh, 106C; (DD & EE) Rh, 108C.  
**1916 (Mod. 56)**—Tim. Brgs.; (A) 337-3320; (B) 236-2320; (D & E) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (O) HB, 205; (Q) HB, 209; (AA) 277-274; (BB) 339-333; (DD & EE) HB, 306.  
**1917 (Mod. 56)**—Tim. Brgs.; (A) 415-412A; (B) 2382-2330; (D & E) 458T-454; (G & H) 375T-3720; (J) 317-312; (K) 439T-4320; (O) DR, 205; (Q) DR, 209; (P) DR, 208; (DD & EE) HB, 306.  
**1918 (Mod. 56)**—Tim. Brgs.; (A) 415-412A; (B) 2382-2330; (D & E) 458T-454; (G & H) 375T-3720; (J) 317-312; (K) 439T-4320; (O) DR, 205; (P) Bower, 208N; (DD & EE) DR, 306.  
**1919-14 (38-6, 48-6, 60-6)**—(A) Tim, 4363-4320 & 3863-3320; (B) 3154-3120; (C) HB, VI; (D) RBF, 110C; (E) RBF, 1166 Sp.; (G) RBF, 110C; (H) HB, 1114; (J) RBF, 109C; (K) HB, 307A; (AA) RBF, 11C; (DD) RBF, 108C; (EE) RBF, 205C.  
**1916-17 (2 Ton)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.  
**1917 (L-6, 60 HP.)**—(A) Tim, 4363-4320; (B) Tim, 3154-3120.  
**1917 (37-6)**—(A) Tim, 3363-3320; (B) Tim, 3154-3120.  
**1917 (Small 8)**—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D & E) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 277-274; (BB) 339-333.  
**1918 (8)**—(AA) Bower, 208N; (BB) Bower, 307A.  
**1919 (56)**—(A) Tim, 415-412A; (B) Tim, 2382-2330; (C) Tim, 3656B-3620; (F) Tim, 458T-454; (G & H) Tim, 375T-3720; (J) Tim, 317-312; (K) Tim, 439T-432; (O) SRB, 205; (AA) Router ¾ x 1½ x 1½" long; (BB) Bower, 208N & (CC) Bower, 307A; (DD & EE) 306.  
**1920-21 (56)**—Tim. Brgs. from A-K; (A) 415-412A; (B) 2382-2330; (F) 311; (G) Hy, 377-3720; (J) 3196-3120; (K) 477-432; (O) 205; (P) 309; (Q) Gurney Spec.; (BB) 308; (D & E) 306.

**PENNSY—1917-18 (Mod. R)**—(F) Hy, 16018; (G & H) Hy, 26063.

**PIEDMONT—1919-20 (4-30)**—(D & E) 208; (J) 206; (K) 306DR; (AA) 208; (BB) 207; (CC) 305.  
**1919 (6-40)**—Tim. Brgs. from A-K; (A) 415-412A; (B) 2382-2330; (D & E) 458T-454; (G & H) 375T-3720; (J) 317-312; (K) 439T-4320; (O) 205; (AA) 205; (BB) 210A; (CC) 307; (DD) 1306A; (EE) 1305AD.  
**1919—(A) Bk, 335; (B) Bk, 235.**  
**1920-21 (6-40)**—(A) Tim, 335-3320; (B) Tim, 235-2320; (D & E) 309; (G & H) Tim, 375-3720; (J) 307DR; (K) 407; (AA) 205; (BB) 210A; (CC) 307; (DD) 1306A; (EE) 1305AD.  
**1921 (4-30)**—(A) Br, 317TX; (B) Br, 235TX; (D & E) 208; (O & AA) 203; (BB) 207; (CC) 305.

**PIERCE-RACINE—1911 (Mod. K)**—(F) Hy, 16701; (G & H) Hy, 16073.

**PIERCE-ARROW—1910-11 (66 HP.)**—Tim. Brgs.; (A) 458-4520; (B) 356-3520; (D) 5356-5320.  
**1910-11-12-13 (48 HP.)**—(A) Tim, 439-4320; (B) Tim, 338-3320; (D) Tim, 4356-5320; (G) 213; (H) 213; (I) 712; (J) 309; (K) 410; (AA) 211; (BB) 309; (CC) 210; (DD & EE) 308.  
**1910-11-12-13 (36 HP.)**—(A) Tim, 340-3320; (B) Tim, 320-312; (D) Tim, 457-4520; also Tim, 461-4520; (G) 312; (H) 212; (I) 711; (J) 308; (K) 409; (BB) 308; (CC) 209; (DD & EE) 307.  
**1912-13 (66 HP.)**—(A) Tim, 458-4520; (B) Tim, 356-3520; (D) Tim, 5562-5520; (G & H) 313; (I) 712; (J) 409; (K) 411; (AA & CC) 212; (BB) 310; (DD & EE) 406.

**1912-13-14 (1½ Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3352-3320; (D) 5554-5520; (E) 5551-5520.

**1912-13-14 (5 Ton)**—Tim. Brgs.; (A) 6355-6321; (B) 4364-4320; (D) 6552-6521; (E) 6554-6521.

**1913-14 (2 Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3352-3320; (D) 5755-5720; (E) 5557-5520.

**1914 (38 HP.)**—Tim. Brgs.; (A) 415-412, also 418-412; (B) 320-312; (D) 5356-5320.

**1914 (48 HP.)**—Tim. Brgs.; (A) 439-4320, also 447-4320; (B) 338-3320; (D) 5565-5520.

**1914 (66 HP.)**—(A) Tim, 458-4520; (B) Tim, 356-3520; (D) Tim, 5566-5520; (G & H) 313; (I) 712; (J) 409; (K) 411; (AA & CC) 212; (BB) 310; (DD & EE) 406.

**1914 (5 Ton)**—Tim. Brgs.; (A) 6355-6321; (B) 4364-4320; (D) 861-852; (E) 6552-6521.

**1915 38 HP.**—Tim. Brgs.; (A) 419-412; (B) 320-312; (D) 5356-5320.

**1915 (48 HP.)**—(A) Tim, 438-4320; (B) Tim, 338-3320; (D) Tim, 5565-5520; (G) 213; (H) 213; (I) 712; (J) 309; (K) 410; (AA) 211; (BB) 309; (CC) 210; (DD & EE) 308.

**1915 (66 HP.)**—(A) Tim, 458-4520; (B) Tim, 356-3520; (D) Tim, 5566-5520; (G & H) 313; (I) 712; (J) 409; (K) 411; (AA & CC) 212; (BB) 310; (DD & EE) 406.

**1915-16-17 (2 Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3352-3320; (D) 5755-5720; (E) 5557-5520.

**1915-16-17 (5 Ton)**—Tim. Brgs.; (A) 419-412; (B) 320-312; (D) 861-852; (E) 6552-6521.

**1916-17 (38 HP.)**—Tim. Brgs.; (A) 419-412; (B) 320-312; (D) 5358-5320.

**1916-17 (48 HP.)**—(A) Tim, 438-4320; (B) Tim, 338-3320; (D) Tim, 5566-5520; (G) 1313; (H) 1213; (I) 712; (J) 309; (K) 410; (AA) 211; (BB) 309; (CC) 210; (DD & EE) 308.

**1916-17 (66 HP.)**—(A) Tim, 463-4520; (B) Tim, 356-3520; (D) 5566-5520; (G & H) 1313; (I) 712; (J) 409; (K) 411; (AA & CC) 212; (BB) 310; (DD & EE) 406.

**(Mod. 38C)**—(D) HB, 212; (I) RIV. 1111; (J) HB, 308; (K) HB, 408; (Q) HB, No. 5; (AA) 209; (BB) 308; (DD & EE) 307.

**(Mod. 38C-2)**—(D) 212; (E) 312; (I) RIV. 1111; (J) 308; (K) 409; (AA) 209; (BB) 308; (DD & EE) 307.

**(Mod. 38C-3)**—(D) 212; (E) HB, 6304; (J) HB, 308; (K) HB, 6409; (Q) HB, No. 5R; (AA) 209; (BB) 308; (DD & EE) 307.

**(Mod. 48B)**—(D) 212; (I) RIV. 1112; (J) 309; (K) 409; (Q) HB, 5; (AA) 211; (BB) 309; (DD) 308.

**(Mod. 66A2)**—(D & E) 313; (I) 1112; (J) 309; (K) 411; (AA) 212; (BB) 310; (DD & EE) 406.

**(Mod. 66A3)**—(D & E) 313; (J) 409; (K) 411; (Q) HB, No. 5R; (AA) 212; (BB) 310; (DD & EE) 406.

**1919-20 (38 HP.)**—(A) Tim, 419-412; (B) Tim, 320-312; (D) Tim, 5358-5320; (G) 212; (H) 312; (I) 1111; (J) 308DR; (K) 409; (O) 1105; (S & AA) 209; (BB) 408; (DD & EE) 307.

**1919-20 (48 HP.)**—(A) Tim, 438-4320; (B) Tim, 338-3320; (D) Tim, 5566-5520; (G) 213; (H) 313; (I) 1112; (J) 309DR; (K) 410; (O) 1105; (S & AA) 211; (BB) 309; (DD & EE) 308.

**1921 (A) Tim, 438-4320; (B) Tim, 315-312; (D) Tim, 5358-5320; (G) 212; (H) 312; (I) 1111; (J) 308DR; (K) 409; (O) 305DR; (P) 210; (S & BB) 208; (AA) 212; (CC) Hy, 18125; (DD & EE) 307; (LL) 206 DR.**

**1918-19 (2 Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3352-3320; (D) 5755-5720; (E) 5557-5520.

**1919-20-21 (5 Ton)**—Tim. Brgs.; (A) 6355-6321; (B) 4364-4320; (D) 861-852; (E) 6552-6521.

**1920-21 (2 Ton)**—(A) Tim, 4553; (B) Tim, 3360; (D & E) N215; (G & H) N217; (J & K) N310; (CC) Hy, 02007.

**1920 (5 Ton)**—(CC) Hy, 02007.

**1921 (3½ Ton)**—Tim. Brgs.; (A) 5551-5520; (B) 440-4320; (D) 6552-6521; (E) 5755-5720.

**PILOT—1915 (55)**—(A) 407; (B) 405; (F) 211; (G & H) 211; (J) 1307; (K) 407; (AA) 308; (BB) 307; (CC) 304; (DD & EE) 308; Hy, 17799.

**1915 (75)**—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (DD & EE) Hy, 17799.

**1917 (6-45)**—(O) 205; (AA) 208; (BB) 207; (DD & EE) 305.

**1918 (6-45)**—(A) Bower, 307; (B) Bower, 305; (D & E) Bower, 209AXL; (G) Bower, 209AX; (H) Gur, 209 Radial; (J) 206NDN; (K) 307A & 307DDN.

**1919 (6-45)**—(A) Bower, 335; (B) Bower, 235; (D & E) Gur, 309 Radial.

**1919-20 (6-45)**—(A) Br, 307N; (B) Br, 305AXL; (D & E) Br, 209; (G) Gur, 209; (H) Br, 209; (J) 306DR; (K) 307DR; (O & CC) Br, 205; (P, S & AA) 208; (DD & EE) 305.

**PIONEER—1919-20 (18-36, G)**—Tim. Brgs.; (A) 3554-3520; (B) 3196-3120; (D & E) 5752-5720; (AA, BB, CC) 455-452; (DD & EE) 5555-5520.

**PITTSBURGH MACHINE TOOL CO.—1914 (Mod. A)**—Tim. Brgs.; (A) 4550-4520 (B) 4361-4320; (C) 443-4320; (D) 5563-5520; (E) 4355-4320.

**POPE HARTFORD—1909-10 (Mod. S-T)**—Tim. Brgs.; (A) 3354-3320; (B) 3150-3210; (D & E) 3762-3720; (J) 3363-3320; (K) 442N-4320.

**1911 (W 4-Cyl., Y 6-Cyl.)**—Tim. Brgs.; (A) 336-3320; (B) 316-312; (C) 3655-3620; (D & E) 375-3720; (J) 3363-3320; (K) 442-4320.

**1912-13 (33-28 6-Cyl., 28 4-Cyl.)**—Tim. Brgs.; (A) 336-3320; (B) 316-312; (C) 3655-3620; (D & E) 375-3720; (J) 3355-3320; (K) 442-4320.

**1912-13 (3 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4553-4520; (C) 443-4320; (D) 5550-5520; some 1912 use 6356-6320; (E) 5351-5320, some 1912 use 5355-5320; (J) 3



- R. C. H.—1915 (D & E) Hy, 16282; (G & H) Hy, 26716; (AA) Hy, 16580; (BB) 307; (DD & EE) 305.**
- V. KNIGHT—1920 (J) (A) Tim, 415-412A; (B) Tim, 2382-2330; (D) Tim, 458-454; (G & H) Tim, 377-3720; (J) Tim, 3196-3120; (K) Tim, 433-432; (S) Tim, 277; (AA) 235; (BB) Tim, 339; (DD & EE) Gur. 306.**
- 1920 (R) (A) Br, 336TXL; (B) Br, 236TX; (D) Br, 310DR; (G & H) Tim, 366-363; (J) Br, 307DR; (K) Gur, 407; (S) Gur, 298; (BB) Gur, 307.**
- RAINER—1918 (All Mod.)—(A) Tim, 3554-3520; (B) Tim, 3161-3120.**
- 1919-20 (1 Ton) (A) 435; (B) 316.**
- 1920 (R-15)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375E-6323; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412**
- RANGER—1920-21 (TK-20-2)—(A) Tim, 4558; (B) Tim, 3360; (D & E) Tim, 6378; (G & H) Tim, 477; (J) 456; (K) 539E; (O) 205; (P) 307; (S) 307-304; (EE) 305; (FF) 306; (GG) Hy, 29095.**
- REGAL—1915-16 (Mod. D)—(D & E) 1208; (F) Hy, 16779; (G & H) Hy, 26252; (J) 206; (K) 306; (AA) Hy, 27788; (BB) Hy, 26728; (DD & EE) Hy, 16506.**
- 1916-17—(G & H) Hy, 26216; (J) 305; (K) 405; (AA) 207; (BB) 305.**
- 1918 (Mod. J)—(G & H) Hy, 26216.**
- 1918 (8 or F)—(AA) Hy, 27788; (BB) Hy, 26728; (DD & EE) Hy, 16506.**
- RELIANCE—1920-21 (10A 1½ Ton)—Tim. Brgs. from A-K; (A) 435-4320; (B) 3191-3120; (D & E) 4553-4520; (G) 3762-3720; (H) 375-3720; (Spur Pinion Shaft) 417-412; (J) 2785-2720; (K) 3196E-3120; (O) 205; (P & AA) 208; (Q) 212; (BB) 307; (CC) 304; (DD) 305; (EE) 306; (GG) Spec.**
- 1920-21 (20-B, 2½ Ton)—Tim. Brgs. from A-K; (A) 4554-4520; (B) 3360-3320; (D & E) 5554E-5520; (G & H) 456-4520; (Spur Pinion Shaft) 447-4320; (J) 3383-3320; (K) 447-4320; (O) 205; (P) 208; (Q) 212; (AA & BB) 308; (DD) 306; (EE) 307; (Drive Shaft front Bearing) 209; (GG) Spec.**
- REO—1914-15 (Mod. R-S)—(A) Tim, 335-3320; (B) Tim, 235-2320; (F) Hy, 16559; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) 26825; (DD & EE) Hy, 2454.**
- \*1915 (Mod. M)—(A) Tim, 355-3520; (B) Tim, 235-2320; (D & E) Tim, 375-3720; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 27996.**
- 1916-17 (Mod. R-S)—(A) Tim, 335-3320; (B) Tim, 235-2320; (F) Hy, 16559; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- \*1916-17 (Mod. M-N)—(A) Tim, 355-3520; (B) Tim, 235-2320; (D & E) Tim, 375-3720; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- \*1917 (Mod. J)—(A) Tim, 4554-4520; (B) Tim, 3360-3320; (D) Tim, 5553-5520; (E) Tim, 4363-4320; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- \*1918 (Mod. T-U)—(A) Tim, 355-3520; (B) Tim, 235-2320; (F) Hy, 16559; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) 419-412; (AA) Hs, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- \*1918 (Mod. F)—(A) Tim, 355-3520; (B) Tim, 235-2320; (D & E) Tim, 375-3720; (G & H) Tim, 395-3920; (J) Tim, 276-2720; (K) Tim, 419-412; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) 26996.**
- 1918-19 (R, S, T, U)—(F) Hy, 16559; (AA) 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- 1919-20 (T6, U6)—(A) Tim, 355-3520; (B) Tim, 235-2320; (Rear Axle end Brg.) Hy, 16559; (G & H) Tim, 395-3920; (Clutch Driven Gear) Hy, 16961; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- 1919-20 (F)—(A) Tim, 355-3520; (B) Tim, 235-2320; (D & E) Tim, 375-3720; (G) Tim, 476-4720; (H) Tim, 419-412; (Clutch Driven Gear) Hy, 16961; (AA) Hy, 27996; (BB) Hy, 26825; (DD & EE) Hy, 26996.**
- REPUBLIC TRUCK—1915 (1 Ton)—(A) Tim, 3750-3720; (B) 3360-3320; (G & H) Hy, 28057; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.**
- (Mod. C)—(A) 309A; (B) 307A; (D) Bower, 310N; (E) Bower, 308N; (K) DR. 310.**
- (Mod. F)—(A) Bower, 308N; (B) Bower, 307N; (D) Bower, 309N; (E) Bower, 306N; (CC) 307 & 304; (DD) 305; (EE) 306.**
- (A 2 Ton)—(A) 310N; (B) 308N; (D & E) 311N; (G & H) Bock, 375; (J) Bock, 335; (K) Bock, 417; (O) 205; (Q) 212; (AA) 304; (BB) 307; (DD & EE) 306.**
- (Dispatch ½ Ton)—(A & B) Sheldon, 1372 & 1371; (D) 308; (E) 306; (G) Bock, 278; (H) Bock, 336; (J) Bock, 275; (K) Bock, 335; (AA) Hy, 16957; (BB) DR. 307; (DD & EE) Hy, 16972; (FF) Hy, 26956.**
- (Special ¾ Ton)—(A) Tim, 3381-3320; (B) Tim, 2382-2320; (D) 308; (E) 306 AXI; (G) Bock, 378; (H) Bock, 336; (J & K) Bock, 275; (AA) Hy, 16957; (BB) DR. 307; (DD & EE) Hy, 16972; (FF) Hy, 26956.**
- (10-1 Ton)—(A) Bower, 308N; (B) Bower, 307N; (D) Bower, 309N; (E) Bower, 306N; (G & H) Bock, 355; (J) Bock, 335; (K) Bock, 417; (O) 205; (AA) 304; (BB) 307; (DD) 308; (EE) 306.**
- (11 1½ Ton)—(A) Bower, 308NX; (Tim, 435; (B) Bower, 306 NX; (Tim, 416; (D) 309N; (E) 306N; (G & H) Bock, 355; (J) Bock, 335; (K) Bock, 417; (O) 205; (AA) 304; (BB) 307; (DD & EE) 306.**
- (T 3-Ton)—(A) Bower, 312; (B) Bower, 311; (D) Hy, 17897; (E) Bower, 410; (G & H) Hy, 26480; (J) 310; (K) H6, 26669; (O) 205; (AA) 304; (BB) 307; (DD & EE) 306.**
- REPUBLIC—1919-20 (10-1 Ton)—(A) Tim, 419-412; (B) Tim, 3191-3120; (D) Br, 309NX; (E) Br, 306NX; (G & H) Tim, 335-3320; (J) Tim, 417-412; (K) Tim, 335-3320; (N & BB) 307; (O) 205; (AA) 304; (DD) 305; (EE) 306; (Jack hSaft) Br, 306NX.**
- 1919-20 (11X 1½ Ton)—(A) Tim, 419-412; (B) Tim, 3191-3120; (D & E) Br, 311ND; (G) Tim, 375-3720; (H) Tim, 3762-3720; (J) Tim, 4368-4320; (K) Tim, 335-3320; (N & BB) 307; (O) 205; (AA) 304; (DD) 305; (EE) 306; (Jack Shaft) 407.**
- 1919-20 (19-2½ Ton)—(A) Tim, 4554-4520; (B) Tim, 3351-3320; (D & E) Br, 311ND; (G) Tim, 375-3720; (H) Tim, 3762-3720; (J) Tim, 4368-4320; (K) Tim, 335-3320; (N & BB) 308; (Drive Shaft Inter.) 309; (AA) 304; (DD & EE) 306; (Jack Shaft) 407.**
- 1919-20 (20-3½ Ton)—(A) Br, 311N; (B) Br, 312N; (D) Br, 316N; (E) Br, 315AL; (G & H) Tim, 458-452; (J) Tim, 460-452; (K) Tim, 3554-3520; (N & BB) 308; (O) 205; (Drive Shaft Inter.) 309; (AA) 304; (DD & EE) 306; (Jack Shaft) 310.**
- REVERE—1919 (C)—(A) Bk, 435; (B) Bk, 316; (D, E, G & H) Bk, 375; (J) Bk, 337; (O) 205; (Q) 209; (AA) Tim, 344; (BB) Tim, 339; (CC) Tim, 306; (DD & EE) 319.**
- 1920-21 (D, F)—(A) Bk, 435; (B) Bk, 316; (D & E) Bk, 209; (G & H) Bk, 210; (J) Bk, N307; (K) Bk, 537; (O) 205; (Q) 209; (AA) Tim, 344; (BB) Tim, 339; (C) Tim, 306; (DD & EE) 319.**
- 1920—(A) Bk, N308; (B) Bk, 316-31; (D & E) Bk, N209; (G & H) Bk, B210; (J) N307; (K) Bk, 537-53.**
- REYNOLDS—1920 (3½ Ton)—(AA) Hy, 57789; (CC) Hy, 26965; (DD) Hy, 16426; (EE) Hy, 17074.**
- RICHMOND—1916-17 (4-35, 6-50)—(F) 407; (G & H) 0311; (K) 0408; (Q) 305; (AA) 211; (BB) 307; (CC) 205.**
- RIDDLE (Coach)—1916 (10-44)—(AA) Tim, 337-3320; (BB, DD & EE) Tim, 335-3320.**
- 1916-17 (16)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3650-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320.**
- RIDDLE—1918-19-20-21—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656-3620; (D & E) 375T-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320.**
- RIDER-LEWIS—(AA) 209; (BB) 208; (DD & EE) 305.**
- RIKER—1918 (B-BB, 3 & 4 Ton)—(G & H) 218; (J & K) 311; (O) 305DR; (Q, AA & CC) 212; (BB) 309; (DD & EE) 308; (GG) 205.**
- 1919—(DD & 4 Ton)—(G & H) 218; (J & L) 311; (Q) 212RT; (AA & CC) 212; (BB) 309; (DD & EE) 308.**
- ROAMER—(G & H) 0209; (J) 0207; (K) 406; (Q) 205; (AA) 210; (BB) 307; (DD) 206; (EE) 306.**
- 1919-20-21 (654-654E-D75E)—(A) Bk, N308-108; (B) Bk, 316-31; (D & E) Bk, N209-09; (G & H) Bk, B210-10; (J) Bk, N307-107; (K) Bk, 537-53.**
- 1919 (C-654)—(O) 205; (AA) 210; (BB) 307; (DD) 305; (EE) 306.**
- 1920 (6-54)—Tim. Brgs.; (A) 415-412A; (B) 2382-2330; (C) 3656B-3620; (D) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (CC) Hy, 16950.**
- 1920 (4-75)—(A) Bk, N308; (B) Bk, 316-31; (D & E) Bk, N209; (G & H) Bk, B210; (J) Bk, N307; (K) Bk, 537-53; (CC) Hy, 16820; (DD & EE) Hy, 17799; (GG) Hy, 29095 x**
- ROBINSON—1917 (J 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.**
- 1917 (K-3 1½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552.**
- ROCK FALLS—1919-20 (1000)—(A) 418; (B) 257; (D, E, G & H) 375; (J) 335; (K) 449; (CC) Hy, 16950.**
- ROSS "EIGHT"—1915 (8-Cyl.)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D & E) 439T-4320; (G & H) 375-3720; (J) 415T-412; (K) 258-2520; (AA) Ann, 210; (BB) Ann, 308; (DD & EE) Hy, 17014.**
- 1916-17 (Mod. C)—(F) 310; (G & H) 0210; (J) 306; (K) 406; (O) 205; (AA) 211; (BB) 307; (DD) 305; (EE) 306.**
- ROTHWEILER—1916 (1 Ton)—(D) Tim, 3554-3520; (E) Tim, 3196-3120.**
- ROWE—1916 (D-W)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA & BB) 357-353; (DD & EE) 339-333.**
- 1916 (E-W)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 357-353; (BB) 339-333.**
- 1917 (C-D-W)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 357-353; (BB) 339-333.**
- 1917 (D-E-W)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 357-353; (BB) 339-333.**
- 1920-21 (C, W 1½ Ton)—(A & B) Bk, 308; (F) Bk, 311; (G & H) Bk, 215; (J) Bk, 407; (K) Bk, 408; (N) Bk, 308; (O) 205; (Q) 209; (AA) Tim, 344; (BB) Tim, 339; (CC) Tim, 306; (DD & EE) Tim, 319.**
- 1920-21 (C, D, W 2 Ton)—(A) Bk, 310; (B) Bk, 308; (F) Bk, 312; (G & H) Bk, 216; (J) Bk, 407; (K) Bk, 410; (N) Bk, 308; (O) 205; (Q) 209; (AA) Tim, 344; (BB) Tim, 339; (CC) Tim, 306; (DD & EE) Tim, 319.**
- 1920-21 (G, S, W, C, P, W-3 Ton)—(A) Bk, 310; (B) Bk, 308; (F) Bk, 314; (G & H) Bk, 217; (J & K) Bk, 408; (L) 3107-D; (N) Bk, 308; (O) 205; (Q) 209; (AA & BB) Tim, 357; (CC) Tim, 306; (DD & EE) Tim, 339.**
- 1920-21 (H, W 4 Ton)—(A) Bk, 312; (B) Bk, 311; (F) Bk, 317; (G & H) Bk, 219; (J) Bk, 409; (K) Bk, 413; (N) Bk, 308; (O) 205; (Q) 209; (AA & BB) Tim, 357; (CC) 306; (DD & EE) 339.**
- 1920-21 (F, W 5 Ton)—(A) Bk, 315; (B) Bk, 314; (F) Bk, 319; (G & H) Bk, 220; (J) Bk, 410; (K) Lx, 414; (N) Bk, 308; (O) 205; (Q) 209; (R) 208; (AA) Tim, 439; (BB) Tim, 435; (CC) Tim, 335; (DD & EE) 415.**
- RUSH—1916 (1,000 lbs.)—(F) Hy, 16294; (G & H) Hy, 26063.**
- 1917-18 (D ½ Ton)—(AA) Hy, 27797; (BB) Hy, 27899.**
- ST. LOUIS—1920 (35)—(A) Tim, 317-312; (B) Tim, 235-2320; (D & E) Hy, 26216; (O) 208; (AA) 208; (BB) 207; (DD & EE) 305.**
- 1920—(A & B) Br, 317TX; (D & E) Br, 208A.**
- SAMSON—1920 (¾ Ton)—(A) 337DR; (B) 338DR; (J) 306DR; (K) 406; (AA) 207; (BB) 306.**
- SANDOW—1915 (C 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5550-5520; (E) 5555-5320; (G & H) 375-3720; (J) 256-2520; (K) 415-412; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 335-3320.**
- 1915-16 (2-Ton W)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 539C-532; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 335-3320.**
- 1916 (3 W)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA & BB) 440-4320; (CC) 335; (DD & EE) 415-412.**
- 1918 (3½ Ton)—(A) Bower, 312N; (B) Bower, 311N.**
- SANDOW—1919-20-21 (G, CC)—(A) Bk, 308; (B) Bk, 307; (F) Br, 311; (G & H) 215DR; (J) 407; (K) 408; (N) 209; (O) 205; (Q) 212; (AA & CC) 304; (BB & DD) 305; (EE) 306; (FF) 1023.**
- 1919-20-21 (J)—Tim. Brgs. from A-K; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539E-532; (N) 299; (O) 205; (Q) 122-C2; (AA) Tim, 306; (BB) Tim, 339; (CC) Tim, 344; (DD & EE) Tim, 319.**
- 1919-20-21 (M)—Tim. Brgs. from A-K; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5757-5720; (G & H) 780-772; (J) 6375-6320; (K) 6375-6323; (O) 205; (Q) 122-C2.**
- 1919-20-21 (L)—Tim. Brgs. from A-K; (A) 5550-5520; (B) 5351-5320; (C) 5354-B-5320; (D) G & H 780-772; (E) 6552-6521; (J) 6455-6422; (K) 6375-6323; (O) 205; (Q) 122-C2.**
- SANFORD—1917 (Mod. O-R-S)—(AA) Tim, 277-274; (B) Tim, 339-333.**
- 1917-18-19 (25)—(A) TR. 310; (B) TR. 309; (C) Sheldon, A392; (F) 314 DR; (G & H) 217 DR; (J) 408; (K) 408; (M) 3107D; (O) 205; (P) 308; (Q) B. & BD. 41; (AA) 210; (BB) 212; (DD & EE) 307.**
- 1917-18-19 (35)—(A) TR. 312; (B) TR. 311; (C) Sheldon A415; (F) 317 DR; (G & H) 219; (O) SKF. 918; (J) 409; (K) 410; (M) 3110D; (O) 205; (P) 308; (Q) B. & BD. 41; (AA) 211; (BB) 212; (DD & EE) 308.**
- 1917-18-19 (50)—(A) TR. 312; (B) TR. 311; (C) Sheldon, A415; (F) 319 DR; (G & H) 219; (I) SKF. 918; (J) 409; (K) 410; (M) 3110D; (O) 205; (P) 308; (Q) B. & BD. 41; (AA) 211; (BB) 212; (DD & EE) 308.**
- 1920 (25 2½ Ton)—(A) Br, 310; (B) Br, 308; (C) A-392 Assem.; (D) 314DR; (G & H) 217DR; (J & K) 408; (M) 3107-D; (O) 205; (P) 308; (Q, R, GG, KK & LL) Spec.; (AA) Tim, 337; (BB) Tim, 339; (CC) Tim, 306; (DD & EE) Tim, 319.**
- 1920 (35 3½ Ton)—(A) Br, 312; (B) Br, 311; (C) A-415 Assem.; (D) 317DR; (G & H) 219; (I) SKF. 918; (J) 409; (K) 410; (M) 3110-D; (O) 205; (P) 308; (Q, R, GG, KK & LL) Spec.; (AA) Tim, 419-336; (BB) Tim, 357; (CC) Tim, 306; (DD & EE) Tim, 339.**
- 1920 (50-5 Ton)—(A) Br, 312; (B) Br, 311; (C) A-415 Assem.; (D) 319DR; (G & H) 219; (I) SKF. 918; (J) 409; (K) 410; (M) 3110-D; (O) 205; (P) 308; (Q, R, GG, KK & LL) Spec.; (AA) Tim, 439; (BB) Tim, 435; (CC & DD) Tim, 415; (EE) Tim, 335.**
- SAUER—(5 Ton)—(A) 408; (D) 315; (E) 409; (K) 313; (T) 209; (U) 210; (V) 206.**
- (6½ Ton)—(K) 314.**
- (D) 319; (E) 413; (G & H) F & S 218; (Q) 204; (T) 206; (U) 209; (W) HB 411; (X & Y) F & S 221; (FF) 302; (HH) 303.**
- SAXON—1916-17 (4-14, B-2)—(F) Hy, 16251; (G & H) Hy, 26231; (AA) Hy, 1625 (K) Tim 315-312.**
- 1916-17 (S-4, 6-B-2)—Tim. Brgs.; (A) 257-2520; (B) 235-2320; (D) 317T-312; (G) 288-284; (H) 355-3520; (K) 334-3320; (AA) Hy, 26518.**
- 1917 (S-5)—Tim. Brgs.; (A) 257-2520; (B) 235-2320; (D) 360T-3520; (G) 288-284; (H) 355-3520; (K) 334-3320.**
- 1917 (4 Cyl.)—(F) Hy, 16251; (G & H) 26231; (AA) Hy, 16255.**
- 1918 (6 Cyl.)—(AA) Hy, 26518.**
- 1920-21—(A) Gilliam 317-312; (B) Gilliam 236-2520; (D) 415; 412; (G & H) Gilliam 3595-3590; (J) Gilliam 257-2520; (K) Gilliam 3381-3320; (O) 303; (Q) 208RT; (CC) Hy, 26972.**



**SAYERS & SCOVILLE—1919**—(A) Br. 307N; (B) Br. 305AXL; (D, E, G & H) 209; (J) 306DR; (K) 406; (O) 205; (AA) 308; (BB) 307; (CC) Hy. 16950; (DD) 305; (EE) 306.  
**1919-20-21 (D, E, F, G)**—(A) 435; (B) 316.  
**1920-21 (CP, DP)**—(A) Bk. 317; (B) Bk. 235-23; (D & E) Bk. N207; (G & H) Bk. 386; (J) Bk. N307; (K) Bk. 315; (O) 205; (AA) 308; (BB) 307; (CC) Hy. 16950; (DD) 305; (EE) 306.

**SCHACHT—1915 (1 & 2 Ton)**—Tim. Brgs.; (A) 3750-3720; (B) 3350-3320; (C) 341-3320; (D & E) 5755-5720.

**1915-16-17 (2 Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5755-5720.

**1915-16-17 (3 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D & E) 5755-5720.

**1917-18-19-20 (B-C-2, 2½, 3, 3½ Ton)**—(A) Tim. 4558-4520; (B) Tim. 3360-3320; (C) Tim. 341B-3320; (D & E) Tim. 5755-5720; (G & H) 214; (I) SKF 913; (J) SKF 1716; (K) 408; (N) 308; (AA) 307; (CC) SKF 2304; (DD) 306; (FF) SKF 2209; (GG) Hy. 29097.

**1918-19-20 (B-C, 5 Ton)**—(A) Tim. 5550-5520; (B) Tim. 5351-5320; (C) Tim. 5354-5320; (D & E) 779-772; (G & H) 219; (I) SKF 913; (J) SKF 1718; (K) 409; (N) 308; (AA) 307; (CC) SKF 2304; (DD) 306; (FF) SKF 2209; (GG) Hy. 29097.

**1920 (D-2½, 3½ Ton)**—(A) Tim. 4550-4520; (B) Tim. 4361-4320; (D & E) Tim. 5755-5720; (G & H) 214; (I) SKF 913; (J) SKF 1716; (K) 408; (N) 308; (AA, FF) 309; (CC & DD) 306; (GG) Hy. 29097.

**1920 (D) 5 Ton**—(A) Tim. 5550-5520; (B) Tim. 5351-5320; (D & E) Tim. 779-772; (G & H) 219; (I) SKF 913; (J) SKF 11118; (K) 409; (AA, FF) 309; (CC, DD) 306; (GG) Hy. 29097.

**SCHWARTZ—1918-19 (1 Ton)**—Tim. Brgs.; (A) 419-412; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (I) 335-3320; (K) 417-412.

**1918-19 (2 Ton)**—Tim. Brgs.; (A) 4554-4520; (B) 3381-3320; (G) 375-3720; (H) 3762-3720; (J) 335-3320; (K) 4368-4320.

**1920**—Tim. Brgs.; (A) 419-412; (B) 3191-3120; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J, BB) 335-3320; (AA) 337-3320; (DD & EE) 316-312.

**1920 (C)**—Tim. Brgs.; (A) 4554-4520; (B) 3381-3320; (G) 375-3720; (H) 3762-3720; (J, BB) 335-3320; (K) 4368-4320; (AA) 337-3320.

**1920 (D)**—Tim. Brgs.; (G & H) 456-452; (J) 3554-3520; (K) 460-452; (AA & BB) 357-353; (DD & EE) 339-333.

**SCRIPPS—1916 (Mod. C)**—(A) 306; (B) 304; (D) 308; (E) 208; (F) Hy. 16392; (G & H) Hy. 26253; (G & H) 0209 Radax; (J) 206; (K) 306 DR; (O) 302; (AA) 207; (BB) 306.

**1917 (Mod. C)**—(A) 306; (B) 304; (D) 308; (E) 208; (F) Hy. 16392; (G & H) Hy. 26253; (G & H) 0209 Radax; (J) 206; (K) 306 DR; (O) 302; (AA) 207; (BB) 306.

**1917 (Mod. D)**—(A) 307; (B) 305; (F) Hy. 16691; (G & H) Hy. 26063; (J) 306; (K) 1406; (O) 302; (AA) 207; (BB) 306.

**1918-19 (6-39, 6-40)**—(F) Hy. 26394; (G & H) Hy. 26223.

**1918 (Mod. H)**—(F) Hy. 16691; (G & H) Hy. 26063.

**1918 (Mod. G)**—(F) Hy. 16395; (G & H) Hy. 26227.

**1918 (Mod. G)**—(F) Hy. 16395; (G & H) Hy. 26227.

**1919 (6-39, 40, 41, 42)**—(J) 306 DR; (K, BB) 307; (AA) 210.

**1919 (C)**—(J) Tim. 319-312; (K) Tim. 348-3320.

**1920 (B Series)**—(D & E) Hy. 26394; (G & H) Hy. 26223.

**SEAGRAVE—1915**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320.

**1915**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320.

**1917 (Mod. L)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320.

**1917 (T-750, S-1000)**—Tim. Brgs.; (A & D) 5550-5520; (B) 5351-5320; (C) 5354-5320; (E) 5551-5520.

**SELDEN—1916 (1½ Ton)**—Tim. Brgs.; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 458C-454; (J & K) 539C-532; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 316-312.

**1916 (2 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 316-312.

**1916 (JW, JWL)**—Tim. Brgs.; (A) 3762-3720; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (O) Ann. 205; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 316-312.

**1916 (JC 2-Ton)**—Tim. Brgs.; (AA) 336-3320; (BB) 337-3320; (CC) 257; (DD & EE) 316-312.

**1916 (TL 1-Ton)**—Tim. Brgs.; (D) 4553-4520; (E) 3762-3720; (G) 559-552; (H-458-454; (J & K) 539-532.

**1916 (N 3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 559-552; (AA & BB) 357-353; (CC) 257; (DD & EE) 339-333.

**1916 (TWL)**—(A) Bock, 308; (B) Bock, 307; (D) Tim. 4553-4520; (E) Tim. 3762-3720; (G & H) Tim. 456-454; (J & K) Tim. 456-453; (O) 209; (S) 205; (AA) Tim. 277-274; (BB) Tim. 339-333; (DD & EE) Gur. 306.

**1916 (JWB)**—(A) Bower, 310 A; (B) Bower, 308A; (D & E) Tim. 5553-5520; (G & H) Tim. 559-552; (J & K) Tim. 559-552; (O) 209; (S) 205; (AA) Tim. 337-3320; (BB) Tim. 335-3320; (DD & EE) Tim. 316-312.

**1916 (JCB)**—(A) Bower, 310A; (B) Bower, 308A; (D) Bower 5553T; (E) Bower, 4554T; (G & H) ND. 208; (J) ND. 306; (K) Hy. 26219; (O) 209; (S) 205; (AA) Tim. 337-3320; (BB) 335-3320; (DD & EE) Tim. 316-312.

**1916 (NL)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D) 5755-5720; (E) 6552-6521; (G & H) 5756-5720; (J) 559-552; (K) 6359-6320; (O) DR. 205; (S) Gur. 205; (AA & BB) 357-353; (CC) 306 no cup; (DD & EE) 339-333.

**1916 (DL)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 6359-6320; (K) 6359-6321; (O) 439-4320; (S) Gurney, 205; (AA) 439-4320; (BB) 440-4320; (CC) 335 no cup; (DD & EE) 415-412.

**1919 (A-1½ Ton)**—Tim. Brgs.; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453; (O) 205; (AA) 277-274; (BB) 339-333; (DD & EE) 306; (GG) Hy. 29097.

**1919-20 (AB, B-1½ Ton)**—Tim. Brgs.; (A) 4364-4320; (B) 3161-3120; (D & E) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539E-532; (AA) 277-274; (BB) 339-333; (GG) Hy. 29097.

**1919 (JWB-2 Ton)**—Tim. Brgs.; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312; (GG) Hy. 29097.

**1919 (DL-5 Ton)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 6454-6420; (K) 6359-6320; (AA) 439-4320; (BB) 440-4320; (DD & EE) 415-412; (GG) Hy. 29097.

**1920 (A-2½ Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (O) 205; (AA & BB) 357-353; (DD & EE) 339-333; (GG) Hy. 29097.

**1920 (A-3½ Ton)**—Tim. Brgs.; (A) 4550-4520; 4361-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359E-6320; (O) 205; (AA & BB) 357-353; (DD & EE) 339-333; (GG) Hy. 29097.

**SENECA—1917**—(F) 208; (G & H) 208; (J) 305S Radials; (K) 0307; (Q) Special; (AA) 307; (BB) 305.

**1920 (Mod. L)**—(G & H) Hy. 26216; (J) 206; (K) 306DR; (Clutch Housing, Rear, O) 207; (AA) 208; (BB) 306.

**1920 (L-20)**—(A) Br. 317TX; (B) Br. 235TX; (G & H) Br. 208AX; (Peru Axle 59R)—(Borg & Beck Clutch, Mod. 8)

**S. J. R.—1917**—(A) 307; (B) 305; (D) 308; (E) 308.

**SERVICE—1916 (HW 70)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA, BB, DD & EE) 335-3320.

**1916 (P-W)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA, BB, DD & EE) 335-3320.

**1916 (Mod. H)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 336-3320; (BB) 419-412; (DD & EE) 339-333; (E) 456C-454; (J & K) 539C-532; (AA) 336-3320; (BB) 419-412; (DD & EE) 339-333.

**1917 (120 1-Ton)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559-552; (H) 456-454; (J & K) 539-532.

**1917 (170, 175, 3½ Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559-552; (AA & BB) 439-4320; (DD & EE) 415-412.

**1917 (130 1½ Ton)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G, H, J & K) 559C-552; (AA) 337-3320; (BB) 415-412; (CC) 257; (DD) 335-3320.

**1917 (140 2-Ton)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G & H) 5756-5720; (J & K) 559C-552; (AA, BB, DD & EE) 335-3320.

5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB) 415-412; (CC) 257; (DD & EE) 335-3320.

**1917 (200 5-Ton)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J & K) 6359-6320; (AA & BB) 439-4320; (DD & EE) 415-412.

**SERVICE—1919-20 (220)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (F) 5550-5521; (G & H) 477-473; (J & K) 456-453; (O) 205; (P) 307; (Q) 1212 Spec; (BB) 307DR; (CC) 304DR.

(DD) 305DR; (EE) 306DR; (FF) 1023 Spec.

**1919 (31, 36 & 41)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539E-532; (O) 205; (P) 308; (AA) 336-3320-419-412; (BB) 357-353; (CC) 306; (DD & EE) 339-333; (GG) C-1161 Spec.

**1919 (71-76)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559-552; (K) 6359E-6320C; (O) 205; (P) 308; (Q, GG) Spec.; (AA) 439-4320; (BB) 435-4320; (CC) 335; (DD & EE) 415-412.

**1919 (101)**—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6520; (J & K) 6359E-6320C; (O) 205; (P) 308; (Q) B & B Spec.; (AA) 439-4320; (BB) 435-4320; (CC) 335; (DD & EE) 415-412; (GG) C-1505 Spec.

**1920-21 (31-36)**—Tim. Brgs.; (F) 6378-6320; (G & H) 477-473; (J) 456-453; (K) 539-532.

**1920-21 (51)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 6378E-5521; (O) 205; (P) 308; (AA) 336-3320-419-412; (BB) 357-353; (CC) 306; (DD & EE) 339-333; (GG) C-1505 Spec.

**1920-21 (71-76)**—Tim. Brgs.; (G & H) 5757-5720; (K) 6375E-6320.

**1920-21 (101)**—Tim. Brgs.; (J) 6375E-6323; (K) 6455E-6422.

**1921 (15)**—(A) Tim. 3381-3320; (B) Tim. 2687-2620; (F) Bk. 573T; (G & H) Bk. N212; (J) Bk. N308; (K) Bk. N307; (O) 205; (P) Tim. 277-274; (BB) Tim. 339-333; (DD & EE) Tim. 306-303; (GG) C-2802 Spec.

**SEVERIN—1920**—Tim. Brgs.; (A) 336-3320; (B) 236-2320; (F) 310DR; (G & H) 366-363.

**1921 (H)**—(A) Br. 419TX; (B) Br. 257TX; (F) 311DR; (G & H) Tim. 385-383; (J) 308DR; (K) Hy. 56654; (CC) Hy. 16828.

**SHAW—1919 (M-Taxi)**—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656-3620; (D & E) 458T-454; (G & H) 375T-3720; (J) 317-312; (K) 439T-432; (AA) 277-274; (BB) 339-333.

**1919 (Taxi)**—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (AA) 339-333; (BB) 277-274.

**1920 (Touring)**—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 462-454; (H) 559-552; (J) 439-432; (K) 539-532; (AA) 339-333; (BB) 277-274; (GG) Hy. 29095.

**SHERIDAN—1921**—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 462-454; (H) 559-552; (J) 439-432; (K) 539-532.

**SIGNAL—1915-16 (Mod. A)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 455-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532; (AA) 439-4320; (BB) 435-4320; (CC) 335; (DD & EE) 415-412.

**1915 (Heavy A)**—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G) 559C-552; (H) 539C-532.

**1916 (Mod. J)**—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257.

**1916 (3 Ton)**—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6520; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 439-4320; (BB) 435-4320; (DD & EE) 415-412.



# Regarding Service on Bearings

**I**N order to continue for the millions of car and truck owners, a broad and comprehensive service on Timken, Hyatt and New Departure bearings, the present plan whereby the Bearings Service Company has acted for six years as the service department of the manufacturers of Timken, Hyatt and New Departure bearings has been supplanted by a new arrangement.

**A**PART of this arrangement will be consummated beginning October 1, 1922 and the plan in full will be completed by January 1, 1923.

**T**HE Bearings Service Company throughout its organization will continue to service Timken bearings just as it always has in the past until January 1, 1923.

**B**EGINNING October 1, 1922, United Motors Service Incorporated will begin to act for the Hyatt Roller Bearing Company and for the New Departure Manufacturing Company as the service department of these bearing manufacturers in a similar manner to the way in which the Bearings Service Company has acted in the past.

**D**URING the months of October, November and December, 1922, the Bearings Service Company and after that date The Timken Roller Bearing Service and Sales Company will act in the servicing of Hyatt and New Departure bearings as authorized service distributors for these products in the following cities where it has direct branches but where United Motors Service does not have branches.

Pittsburgh.....117 S. Highland Ave.  
Portland.....24 N. Broadway  
Brooklyn.....1408 Bedford Ave.  
Fresno.....907 Van Ness Ave.  
Milwaukee.....145 Oneida St.  
Salt Lake City.....64 W. 4th St. S.

Baltimore.....1041 Cathedral  
Newark.....458 Broad St.  
Oklahoma City.....1116 N. Broadway.  
Richmond.....1309 W. Broad St.  
Birmingham.....613 S. 20th St.  
Winnipeg.....327 St. Mary's Ave.

**O**N and after January 1, 1923, a new concern to be known as The Timken Roller Bearings Service and Sales Company will service Timken Tapered Bearings and maintain direct branches in the same 32 cities and at the same addresses at which the Bearings Service Company's direct branches are now located.

## Bearings Service Company

### THIRTY-TWO BRANCHES

Atlanta  
Baltimore  
Birmingham  
Boston  
Brooklyn

Buffalo  
Chicago  
Cleveland  
Dallas  
Denver

Detroit  
Fresno  
Indianapolis  
Kansas City

Los Angeles  
Milwaukee  
Minneapolis  
Newark

New Orleans  
New York  
Oklahoma City  
Omaha  
Philadelphia

Pittsburgh  
Portland, Ore.  
Richmond  
Salt Lake City  
San Francisco

Seattle  
St. Louis  
Toronto  
Winnipeg

*Approximately 1000 Distributors in Other Cities*



## STANDARD—Continued

1916—(O) 205; (AA) 211; (BB) 307; (DD & EE) 306.  
 1919-20-21 (56, 1K)—Tim. Brgs.; (A) 4364-4320; (B) 3161-3120; (F) 539-532; (G & H) 397-392; (J) 444-432; (K) 456-453; (N) SKT. 1304-A; (O) 205; (P) 277; (Q) 209; (BB) 339; (CC) 235; (DD & EE) 306.  
 1919-20 (76)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578-5521; (O) 205; (P) 208DR; (Q) 209; (AA) 337; (BB) 339; (CC) 306; (DD & EE) 319.  
 1919-20 (66)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375-6323; (O) 205; (P) 208DR; (Q) 209; (AA) 419-336; (BB) 339; (CC) 306; (DD & EE) 339; (KK & LL) 579.  
 1919-20-21 (86, 5K)—Tim. Brgs.; (A) 5550-5520; (B) 6351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 6375-6323; (K) 6455-6422; (O) 205; (P) 208DR; (Q) 209; (AA) 439; (BB) 435; (CC) 335; (DD & EE) 415; (KK & LL) 579.

## STANDARD SIX—1914-15 (Touring)—(F) Hy, 16722; (G &amp; H) Hy, 26062.

1916-17 (Pleas.)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.  
 1918 (Mod. E)—(DD & EE) Hy, 17799.

## STANDARD "8"—1919 (H)—Tim. Brgs.; (A) 415-3416; (B) 2382-2330; (E) 458T-454.

(G & H) 375T-3720; (J) 317-312; (K) 439T-432; (O) 205.  
 1920 (I)—Tim. Brgs.; (A) 415-412A; (B) 2382-2330; (C) 3656B-3620; (E) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (O) 205

## STANLEY—1915 (8-14)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (G &amp; H) 435-4320.

1915 (716)—Tim. Brgs.; (A) 415-412; (B) 316-312; (G & H) 415-412.  
 1916-17 (716-724)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D) 456-4520; (G & H) 435-4320  
 1920-21 (735)—(A) Bk, N308-108; (B) Bk, 316-31; (F) 211DR; (G & H) Bk, 435-43; (Dynomio Pinion—Drive Rod Gear for Pumps) 205; (Pump Drive Rod Crank) 202

## STANWOOD—1920—(A) Bk, N307; (B) Bk, N305; (D &amp; E) Bk, 276-27; (G &amp; H) Bk, N210; (K) Bk, 3191-3110; (J) Bk, N305

## STEARNS KNIGHT—1914 (SK 4)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D) 397-394; (E &amp; G) 375-3720; (H) 539-532; (O) Ann, 304; (AA) Ann, 210; (BB) Ann, 308; (DD) Ann, 306

1914 (SK. 6)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D) 397-394; (E & G) 375-3720; (H) 539-532; (O) Ann, 305; (AA) 310; (BB) Ann, 3090; (DD & EE) 306.  
 1915 (SK. 4)—(A) Tim, 419-412; (B) Tim, 316-312; (D) Tim, 397-394; (E & G) Tim, 375-3720; (H) 539-532; (J & K) 308; (O) 304; (AA) 210; (BB) 308; (CC) 304; (DD & EE) 306

1915 (SK. 6)—(A) Tim, 419-412; (B) Tim, 316-312; (C) Tim, 3656-3620; (D) Tim, 397-394; (E & G) Tim, 375-3720; (H) Tim, 539-532; (J) 308; (K) 309; (O) 304; (AA) 310; (BB) 309; (CC) 305; (DD & EE) 306.  
 1916-17 (4)—(F) Hy, 21777; (G & H) Hy, 27032; (DD & EE) Hy, 17799; (FF) Hy, 26972; (J) 209DR; (AA) 210; (BB) 307.

1916 (8)—(F) Hy, 17074; (G & H) Hy, 27032; (DD & EE) Hy, 17799; (FF) Hy, 26972; (J) 308DR.  
 1917 (Pleas.)—(A) Tim, 415-412; (B) Tim, 258-2520.

1917 (SKL-432) (SK-8-33)—(F) Hy, 17074; (G & H) Hy, 27032; (DD & EE) Hy, 17799; (FF) Hy, 26972.  
 1918 (SKL-8, SKL-4)—(F) Hy, 17074; (G & H) Hy, 26474; (DD & EE) Hy, 17799; (FF) Hy, 26972.

1919-20-21 (SKL-4)—(A) Bk, 418-41; (B) Bk, 316-31; (F) Hy, 17074; (G & H) Hy, 26474; (J) Hy, 27793; (K) 308DR; (O) Hy, 27787; (P, AA) 210; (BB) 307; (CC) Hy, 16828; (DD & EE) Hy, 27799; (FF) Hy, 26972.

## STEGMAN—1915 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4558-4520; (E) 4365-4320.

1915 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5550-5520; (E) 4365-4320  
 1915 (3 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6356-6321; (E) 6356-5320.

1917 (1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539-532; (AA) 337-3320; (BB) 335-3320; (CC) 257; (DD & EE) 316-312.  
 1917 (2½ Ton)—Tim. Brgs.; (A) 3360-3320; (B) 4558-4520; (D & E) 5756-5720; (G & H) 559-552; (J & K) 539-532; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257 cone.

1917 (3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (D) 861-852; (E) 6552-6521; (G & H) 5756-5720; (J & K) 559-552; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257 cone.

1917 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (D) 861-852; (E) 6552-6521; (G & H) 5756-5720; (J & K) 559-552; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257 cone.

STEPHENS (Six)—(A) Bower, 307N; (B) Bower, 305A; (D & E) Bower, 210A; (G & H) 209RT; (J & K) 406; (O) 205; (BB) 307.  
 1919 (1-Series 80)—(A) Br, 307N; (B) Br, 305AXL; (D & E) Br, 210AXL; (G & H) 209; (J) 306; (K) 406; (S, AA) 209DR; (BB) 307DR; (P, Q, GG, KK & LL) Spec.; (O) 205.

1919-20 (2, 3-Series 80)—(A) Bk, N307; (B) Bk, N305; (D & E) Bk, 276-27; (G & H) Bk, 209-09A; (J) Bk, 308; (K) 3191; (O) 205; (Q, GG, KK & LL) Spec.; (S, AA) 209DR; (BB) 307DR.

1921 (4-Series 80)—Tim. Brgs. from A-K; (A) 415-412A; (B) 2382-2320; (F) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (O) 205; (Q, GG, KK) Spec.; (S, AA) 209DR; (BB) 307DR.

## STERLING—1919-20-21 (1½ Ton)—Tim. Brgs.; (A) 4364-4320; (B) 3161-3120; (D) 6375-6320; (G &amp; H) 477-473; (J) 456-453; (K) 539E-532; (N) 309; (O) 205; (Q) 209; (AA) 344-333; (BB) 339-333; (CC) 306-303; (DD &amp; EE) 319-313; (GG) Hy, C600; (HH) Hy, 27095.

1919-20-21 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (N) 307; (O) 205; (Q) 209; (AA) 344-333; (BB) 339-333; (CC) 306-303; (DD & EE) 319-313; (GG) Hy, C600; (HH) Hy, 27095.

1919-20-21 (2½ Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (N) 307; (O) 205; (Q) 209; (AA & BB) 357-353; (CC) 306-303; (DD & EE) 339-333; (GG) Hy, C-600; (HH) Hy, 27095.

1919-20-21 (3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4420; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (O) 204; (P) 308; (Q) 209; (AA) 210; (BB) 214; (CC) Hy, 17987; (DD) 307; (EE) 309; (FF) Hy, 27985; (GG) Hy, C-600; (HH) Hy, 27095.

1919-20-21 (5 Ton-Chain)—Tim. Brgs.; (A) 5550-5520; (B) 5357-5320; (C) 5354-5320; (D) 780-772; (E) 6552-6521; (G & H) Hy, 56657; (Jack Shaft Bearing R & L) 313 DR; (O) 305; (P) 308; (Q) 210; (AA) 212; (BB) 214; (CC) Hy, 17987; (DD & EE) 309; (FF) Hy, 27986; (GG) Hy, C-600; (HH) Hy, 27095.

1919-20-21 (7½ Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 780-772; (E) 6552-6521; (Jackshaft Bearing, R & L) 313DR; (O) 205; (P) 308; (Q) 210; (AA) 212; (BB) 214; (CC) Hy, 17987; (DD & EE) 309; (FF) Hy, 27986; (GG) Hy, C-600; (HH) Hy, 27095.

STERNBERG & AMS STERLING—1912-13-14-15 (2, 3-Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5351-5320

1912-13-14-15 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321.

1914-15 (6, 7 Ton)—Tim. Brgs.; (A) 6356-6321; (B) 5355-5320; (C) 5354-5320; (D) 6550-6521; (E) 6354-6321.

1916 (5 Ton)—Tim. Brgs.; (D) 6550-6521; (E) 6354-6321; (AA) 440-4320; (BB) 435-4320; (CC) 335 cone; (DD & EE) 415-412.

1916 (2, 3½ Ton)—Sterling numbers 3003 to 3102; (A) 312; (B) 311; (F) 317; (G & H) 219; (J) 409; (K) 410; (O) 205; (Q) 209; (AA) Tim, 337-3320; (BB, DD & EE) Tim, 335-3320; (CC) Tim, 257.

1915-16 (3½ Ton)—Sterling numbers 3243 to 3557; (A) 312; (B) 311; (F) 317; (G & H) 219; (J) 409; (K) 410; (O) 205; (Q) 209.

1917 (2½, 3½ Ton)—(AA) Tim, 337-3320; (BB, DD & EE) Tim, 335-3320; (CC) 257.

1917 (3½ Ton)—(Q) 209; (AA) 214; (BB) 309; (DD & EE) 307.

1917 (5 Ton)—(O) 305; (P) 308; (Q) 210; (AA) Tim, 440-4320; (BB) Tim, 435-4320; (CC) Tim, 335 cone; (DD & EE) Tim, 415-412.

1917 (7 Ton)—(D) Tim, 936-932; (E) Tim, 6554-6521; (O) 305; (P) 308; (Q) 210; (AA) Tim, 440-4320; (BB) Tim, 435-4320; (CC) Tim, 335 cone; (DD & EE) Tim, 415-412.

STEVENS DURYEA—1909 (5, 8, 9, A) Tim. Brgs.; (D & E) 4354-4320; (G) 3762-3720; (H) 3958-3920; (J) 3356-3320; (K) 435-4320.

1910-11 (AA, AAA)—Tim. Brgs.; (A) 357-353; (B) 305-303.

1910 (Mod. S)—(A) 308; (B) 404; (D) 210; (E) 311; (J) 309; (K) 311; (O) 305; (AA) 307; (BB) 308; (DD & EE) 306.

1915 (6)—(A) 309; (B) 405; (D) 310; (E) 311; (J) 309; (K) 311; (AA) 308; (DD & EE) 306; (GG) 2 No. 303; (HH) 303

1920 (E)—(A) 309; (B) 405; (C) 2993; (D, G, H, K) 311; (E) 210; (J) 309DR; (O, DD & EE) 306; (Q, KK & LL) Spec.; (BB) 308; (GG) 302; (HH) 303DR.

STEWART IRON WORKS—1913 (1 Ton)—Tim. Brgs.; (A) 3757-3720; (B) 3362-3320; (D) 4553-4520; (E) 4351-4320

STEWART—1918 (8) (A) Br, 308AXL; (B) Br, 305AXL  
 1920—(B) (A) Bk, 336; (B) Bk, 236.

1916 (1,500 lbs.)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (H) 16670; (G) 456-454; (Hy, 26069; (H) 559-552; (Hy, 26069; (J) 439-4320; (K) 539-5320; (Hy, 26668).

1916 (Delivery)—Tim. Brgs.; (A) 337-3320; (B) 236-2330; (D) 439T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

1918 (1,500 lbs.)—(F & J) 306DR; (O) 205; (AA) 207DR; (BB) 305DR.  
 1918 (1½ Ton)—(E & J) 307DR; (O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.

1918 (2 Ton)—(E) Br, 308; (J) 307DR; (O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.  
 1919 (¾ Ton)—(D & J) 306DR; (O) 203; (AA) 207DR; (BB) 305DR.

1919 (1½ Ton)—(A) Bk, 435; (B) Bk, 316; (D & E) Hy, 16670; (F) 307DR; (G & H) Hy, 26069; (J) Hy, 26668; (O, Q) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306; (GG) Hy, 29097.

1919-20 (2 Ton)—(A) Bk, 455; (B) Bk, 355; (D & E) Hy, 26662; (G & H) Hy, 26388; (J) Hy, 26777; (O) 205; (AA & BB) 307; (CC) 304; (DD & EE) 306.

1919 (3½ Ton)—(D & E) Hy, 47897-47893; (G & H) Hy, 26480; (J) Hy, 26669; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306; (GG) Hy, 29097.

1919-20-21 (Deliver 11)—(A) Bk, 336; (B) Bk, 236.  
 1920 (8, 12-1 Ton)—(D & E) Hy, 46670; (G & H) Hy, 26069; (J) Hy, 26668; (O) 205; (AA) 209; (BB) 307; (GG) Hy, 29097.

1920 (9-1½ Ton)—(D & E) Hy, 46670; (G & H) Hy, 26069; (J) 26668; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1920 (11-¾ Ton)—(D & E) Hy, 46667; (G & H) Hy, 26391; (J) Hy, 16594; (O) 205; (AA) 209; (BB) 307; (GG) Hy, 29097.

1920 (10-3½ Ton)—(D & E) Hy, 47893; (G & H) Hy, 26480; (J) Hy, 26669; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306; (GG) Hy, 29097.

1920 (7 X)—(D) 308DR; (J) 307DR; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306; (GG) Hy, 29097.

STODDARD DAYTON—1912 (30-38)—(D) 309; (E) 209; (G & H) Hy, 26056; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.

1912 (S-D-48)—Tim. Brgs.; (A) 336-3320; (B & J) 317-312; (G, H & K) 375-3720.  
 1912 (48-58 Knight)—Tim. Brgs.; (A) 336-3320; (B) 317-312; (G, H & K) 456-4520; (J) 337-3320.

1912-13 (H 2-Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4363-4320; (C) 443-4320; (D) 5683-5520; (E) 4365-4320; (G, H & AA) 3762-3720; (J) 417-412; (K) 3554-3520; (BB) 417-412; (DD & EE) 3360-3320.

1912-13 (K 3-Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320; (G, H & AA) 3955-3920; (J & BB) 3762-3720; (K) 955-920; (DD & EE) 3459-3420.

1912-13 (M 5-Ton)—Tim. Brgs.; (A) 6356-6321; (B) 5325-5320; (C) 5354-5320; (D) 6550-6521; (E) 6350-6321; (G, H & AA) 3955-3920; (J & BB) 455-4520; (K) 954-920; (DD & EE) 3459-3420.

STOUGHTON—1920-21 (A-1-Ton)—(A) Bk, 308; (B) Bk, 307; (F) 311DR; (G & H) 213; (J) 307; (K) 407DR; (N) 307; (O) 205; (Q) 209; (AA) Tim, 277; (BB) Tim, 339; (CC) Tim, 235; (DD & EE) 306.

1920-21 (¾ Ton)—(A) Bk, 308; (B) Bk, 307; (F) 311DR; (G & H) 215DR; (J) 407; (K) 408DR; (N) Tim, 335-3320; (O) 205; (Q) 209; (A) Tim, 277; (BB) Tim, 339; (CC) Tim, 235; (DD & EE) 306

1920-21 (D-2 Ton)—(A) Bk, 310; (B) Bk, 308; (F) 312DR; (G & H) 216DR; (J) 407; (K) 410DR; (N) Tim, 335-3320; (O) 205; (Q) 209; (AA) Tim, 344; (BB) Tim, 339; (CC) Tim, 306 (DD & EE) Tim, 319.

1920-21 (F-3 Ton)—(A) Bk, 310; (B) Bk, 308; (F) 314DR; (G & H) 217DR; (J & K) 408; (L) 3107; (N) Tim, 419; (O) 205; (Q) 209; (AA & BB) Tim, 357; (CC) Tim, 306; (DD & EE) Tim, 339.

STUDEBAKER—1914-15 (E-3 6-Cyl. & Del.)—Tim. Brgs.; (A) 3196-3120; (B) 2380-2330; (D & E) 358-354; (G & H) 375-3720; (J) 421-414; (AA) 256-2530; (BB) 365-363.

1914-15 (SC 25-4 Cyl.)—Tim. Brgs.; (A) 2690-2630; (B) 751-730; (D & E) 358-354; (G & H) 375-3720; (J) 421-414; (AA) 256-2530; (BB) 365-363.

1916 (Jitney 1 Ton, ½ Ton)—Tim. Brgs.; (A) 3196-3130; (B) 2380-233



## SULLIVAN—Continued

1917 (Mod. E)—Tim. Brgs.; 520 Front Axle; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (O) 205; (AA) 337-3320; (BB) 335-3320; (CC) 257 cone; (DD & EE) 316-312.  
 1917 (Mod. F)—Sheldon D-343 Front Axle Bock Brgs.; (D & E) Tim. 6551.  
 1915-16-17 (1½ Ton)—(G & H) Hy, 28057; (AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.  
 1918-19 (1½ Ton)—(AA) Hy, 27794; (BB) Hy, 26733; (DD & EE) Hy, 16516.  
 1918 (Mod. E)—Tim. 1520 Front Axle; (D & E) Tim. 6552; (O) Gur. 205.  
 1918 (Mod. F)—Sheldon D-343 Front Axle Bock Brgs.; (D & E) Tim. 6552.  
 1919 (Mod. E)—Tim. 1520 Front Axle; (D & E) Tim. 6552; (O) Gurney, 205.  
 1920 (H)—(O) 205; (AA) Tim. 419; (BB) Tim. 357; (CC) Tim. 306; (DD & EE) Tim. 339;  
 1920 (E-2 Ton)—(O) 205; (AA) Tim. 337; (BB) Tim. 335; (CC) Tim. 257; (DD & EE) Tim. 316.

SUN—1916 (16)—(F) 209; (G) 0209; (H) 209; (J) 207; (K) 307; (O) 205; (AA) 209; Hy, 27797; (BB) 307; Hy, 27899; (D & E) Hy, 26972; (FF) Hy, 26956; also (D & E) Bower, 209AL.  
 1917 (17)—(D & E) Bower, 209AL; (F) 309; (BB) 307; (CC) 210; (DD) 305; (EE) 306.

## SUPER TRUCK—1919 (30-1½ Ton)—(O) 205; (AA &amp; BB) 307; (CC) 304; (DD) 305; (EE) 306

1919 (60-3, 70-3½ Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 413DR; (O) 205; (Clutch Housing, Rear) 208; (AA & BB) 308; (CC) 304; (DD & EE) 306  
 1919 (100-5 Ton)—(A) 315DR; (B) 314DR; (F) 319DR; (G & H) 220DR; (J) 410; (K) 414DR; (O) 205; (AA & BB) 310; (CC) 305; (DD) 307; (EE) 308.  
 1919 (40-2 Ton)—(A) Tim. 4554-4520; (B) Tim. 3660-3220; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306; (GG) Hy, 29097.  
 1919-20 (50-2½ Ton)—(A) 310DR; (B) 309DR; (F) 314DR; (G & H) 217DR; (J & K) 408; (O) 205; (Clutch Housing, Rear) 208; (AA & BB) 308; (CC) 304; (DD & EE) 306.  
 1920 (30-1½, 40-2 Ton)—(G) Hy, 29097.  
 1920 (70-3½ Ton)—(A) 312DR; (B) 311DR; (F) 317DR; (G & H) 219; (J) 409; (K) 410; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306; (GG) Hy, 29097.  
 1920 (100-5, 150-7½ Ton)—(A) 312DR; (B) 311DR; (F) 319DR; (G & H) 220DR; (J) 410; (K) 414DR; (AA) 309; (BB) 310DR; (CC) 310; (DD) 308; (EE) 309; (CC) Hy, 29097.

TAIT BROS.—1917 (A 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320 (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB) 335-3320; (DD & EE) 316-312.  
 1916 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532

TARKINGTON—1920—Tim. Brgs.; (A) 3381-3320; (B) 2380-2320; (D) 439T-432; (G & H) 375-3720; (J) 2780-2720; (K) 441-432.

TEGETMEIER & REIPE—1918-19 (M)—Tim. Brgs.; (A) 4558-4521; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1920 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521.

TEMLAR—1919-20-21 (445-A445)—(A & J) Bk. 335; (B & C) Bk. 236; (F) 307DR; (G & H) Bk. 355; (AA) 210; (BB) 307; (GG) Hy, 29095.

TEXAN—1918 (Pleas.)—Tim. Brgs.; (A) 317-312; (B) 235-2330; (D & E) 277-274.  
 1920 (A-38)—(G & H) Hy, 26216; (J) 306DR; (K) 206; (O) 205; (AA) 207.

THOMAS, E. R.—1911 (7-8-9-12 K-2, K-3)—(A) Tim. 3750-3720; (B) Tim. 3154-3120.  
 1912 (6-40 MC)—(A) Tim. 419-412; (B) Tim. 316-312; (C) Tim. 3654-3620; (D, E & G) Tim. 375-3720; (H) Tim. 455-4520; (I) HB. 110-F; (J) Tim. 336-3320; Ann. 409; (K) Tim. 435-4320; Ann. 212; (O) Tim. 395-3920; Ann. 206; (AA) 307; (BB) 308; (DD & EE) 406; (GG) 203

1916 (M-C)—Tim. Brgs.; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532.

THOMAS AUTO TRUCK—1917 (40)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

THREE POINT TRUCK—1920 (A-13)—Tim. Brgs.; (A) 6358-6320; (B) 4364-4320; (G & H) 780-772; (J & K) 6377-6320; (BB) 539-532; (DD & EE) 4364-4320.

TIFFIN—1917 (M-W 2-Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) Hy, 26557; (BB) Hy, 26697; (DD & EE) Hy, 16698.

1917 (M-C 3-Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320; (G & H) 375-3720; (J) 236-2320; (K) 415-412; (AA) Hy, 26557; (BB) Hy, 26697; (DD & EE) Hy, 16698.

1918 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5553-5520; (G) 559-552; (H & J) 539D-532.

1918 (MC-2, 2½, 3 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 5550-5520; (E) 5355-5320; (G & H) 375-3720; (J) 236-2320; (K) 415-412.

1919-20-21 (1½ Ton)—(A) Bk. N310; (B) Bk. N308; (AA) Hy, 26557; (BB) Hy, 26697; (DD & EE) Hy, 16698; (GG) Hy, 29097.

1919-20-21 (3½ Ton)—(A) Bk. N312; (B) Bk. N311; (AA) Hy, 57789; (BB) Hy, 57896; (DD & EE) Hy, 16748; (GG) Hy, 29097.

1919-20-21 (5-6 Ton)—(A) Bk. N315; (B) Bk. N314; (AA) Hy, 56495; (BB) Hy, 56687; (CC & FF) Hy, 17966; (DD & EE) Hy, 17080; (GG) Hy, 18130.

1920 (A-¾ Ton)—(G) Hy, 26219; (GG) Hy, 29097.

TIT—1918-19 (Transport-Heavy Duty 3½-5 Ton)—(E) Bower, 318NDT; (F) (G & H); Hy, 26480; (K) Hy, 26669.

TITAN—1919 (5-6 Ton)—(E) 318DR; (J) 310DR; (K) 410DR; (O) 205; (AA) 213DR; (BB) 309DR; (DD & EE) 307.

1920-21 (2½ Ton)—(A) Tim. 4554-4520; (B) Tim. 3360-3320; (D & E) Hy, 26662; (G & H) Hy, 26388; (J & K) Hy, 56777; (O) 205; (AA & BB) 308; (DD) 305; (EE) 306; (GG) Hy, 29097.

1918-19-20-21 (3½ Ton)—(A) Tim. 4553-4520; (B) Tim. 4365-4320; (D & E) Hy, 47893; (G & H) Hy, 26480; (J & K) Hy, 26669; (O) 205; (AA & BB) 309; (CC, FF) Hy, 26839; (DD) 306; (EE) 307; (GG) Hy, 29097.

1918-19-20-21 (5-6 Ton)—(A) Tim. 5554-5520; (B) Tim. 5354-5320; (D & E) Hy, 47893; (G & H) Hy, 26480; (J & K) Hy, 26690; (O) 205; (AA & BB) 310; (CC & FF) Hy, 17966; (DD & EE) 307; (GG) Hy, 29097.

TOURNAINE—1914 (12)—(A) Tim. 415-412; (B) Tim. 316-312; (C) 3656B-3620; (K) Spec. Ann. No. 307 x 1½.

1916—(J) 306; (K) 406; (BB) 307.

TOWER—1917 (½ Ton)—Tim. Brgs.; (A) 415-412; (B) 316-312; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320.

1917 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.

1918 (B)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 5550-5520; (G & H) 477-473; (J & K) 456-453.

1919-20 (J-1½, H2½, G3½ Ton)—(GG) Hy, 29097.

TRAFFIC—1918 (2 Ton)—(G) Hy, 26219; (AA) Hy, 27797; (DD & EE) Hy, 26972; (FF) Hy, 26956.

1919 (Mod. A)—(A) Tim. 3381-3320; (B) Tim. 2382-2320; (D) Bower, 309M; (E) Bower, 307M; (G) Hy, 26219; (H) 208; (J) 306; (K) 406; (N) Hy, 18297; (W) 2.1875' ID x 2.875' long; (X) 2.218' ID x 2.500' long; (Y) 2.250' ID x 3.000' long; (AA) Hy, 17797; (BB) ND Spec.; 307; (CC) Hy, 16957; (DD & EE) Hy, 16972; (FF) Hy, 26956; (KK & LL) 1.8437' OD x 1.126' ID x 0.6875' long.

1919 (C)—(A) Tim. 3381-3320; (B) Tim. 2382-2320; (D) Br. 309M; (E) Br. 307M; (G) Hy, 1447; (H & Thrust) 208DR; (J) 306DR; (K & L) 406DR; (N) Hy, 18297; (O) Spec.; (S, CC) Hy, 16957; (AA) 209; (BB) 307DR; (DD & EE) 306; (FF) Hy, 26956; (KK & LL) 205DR.

TRANSIT—1916 (3 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D) 5563-5520; (E) 4365-4320; (G & H) 375-3720; (J) 256-2520; (K) 415-412.

TRANSPORT TRACTOR—1917—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (F) Hy, 26662; (G & H) Hy, 26388; (AA) 337-3320; (BB, D & EE) 335-3320; (CC) 257 Cone; (GG) Hy, 29097.

TRANSPORT TRUCK—1920-21 (20-1 Ton)—(A) Bk. 435; (B) Bk. 316; (D) Hy, 16670; (E & J) 307DR; (G & H) Hy, 16669; (I) Spec. 243E; (K) Hy, 26668; (O) 205; (Q) 212; (AA) 304; (BB, CC) 307; (DD) 305; (EE) 306; (GG) C-600.

1919-20-21 (30-1½ Ton)—(A) Bk. 435; (B) Bk. 316; (D) Hy, 16670; (E, J) 307DR; (G & H) Hy, 16669; (I) Spec. 243E; (K) Hy, 26668; (N) 308; (O) 205; (Q) 212; (AA) 304; (BB) 307; (CC) 308; (DD) 305; (EE) 306; (GG) C-600.

1919-20-21 (50-2½ Ton)—(A) Bk. 455; (B) Bk. 335; (D) Hy, 26668; (E) 308DR; (G & H) Hy, 26057; (I) Spec. 53-E; (J) 307DR; (K) Hy, 26777; (N) 308; (O) 205; (Q) 212 (AA) 304; (BB & CC) 308; (DD & EE) 306; (GG) C-600.

1920-21 (70-3½ Ton)—(A) Tim. 4553-4520; (B) Tim. 4365-4320; (C) F-247; (D) Hy, 17897; (E) 410DR; (G & H) Hy, 26480; (I) Spec. 53-E; (J) 310DR; (K) Hy, 26669; (N) 308; (O) 205; (AA & CC) 309; (BB & FF) R-287; (DD) 306; (EE) 307; (GG) C-600.

TRIANGLE—1919-20-21 (Mod. A)—(A) Bk. 435; (B) Bk. 316; (D) Hy, 16670; (E, J, Internal Gear Pinion) 307DR; (G & H) Hy, 26069; (K) Hy, 26668; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1919-20-21 (Mod. B)—(A) Tim. 554-520; (B) Tim. 381-320; (D) Hy, 26662; (E) 308DR; (G & H) Hy, 26057; (J) 307DR; (K) Hy, 26777; (Internal Gear Pinion) 309DR; (O) 205; (AA & BB) 308; (CC) 304; (DD & EE) 306.

1919-20 (Mod. A)—(A) Tim. 381-320; (B) Tim. 382-320; (D) Hy, 16667; (E & J) 306DR; (G & H) Hy, 26391; (K) Hy, 16594; (Internal Gear Pinion) Hy, 16215; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

1919-20 (Mod. C)—(A) Tim. 554-520; (B) Tim. 381-320; (D) Hy, 26662; (E) 308DR; (G & H) Hy, 26057; (J) 307DR; (K) Hy, 26777; (Internal Gear Pinion) 309DR; (O) 205; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

TRIUMPH—1920 (H-1½ Ton)—(G) Hy, 26084; (H) Hy, 26085.

TRUXTON—Attachment for any car—1919—(2500)—(D) Br. 307N; (E) Br. 309N; (H) 208; (J) 306DR; (K) 406.

1919 (E-3 Ton)—(G) Hy, 26084; (H) Hy, 26085.

1919 (H-5000)—(J) 307DR; (K) 407.

1919 (B, D for Fords)—(G) Hy, 26084; (H) Hy, 26085; (J) 307DR; (K) 407.

1919 (AC-1½ Ton, for Fords)—(G) Hy, 26219.

TULSA—1918 (Mod. T-A-B)—(G & H) Hy, 26216.

1919 (TA)—(D & E) Br. 208AX; (G & H) Hy, 26216; (I) Salis, 6177; (J) 208; (K) 406.

1920-21 (E)—(A) Br. 336TXL; (B) Br. 236TX; (F) 310DR; (G & H) Tim. 366-363; (J) 307DR; (K) Hy, 57883.

TWIN CITY—1920 (2 Ton)—(D & E) Hy, 26662; (G & H) Hy, 26388; (J) Hy, 56777; (GG) Hy, 29097.

1920 (3½ Ton)—(AA & BB) 309; (DD) 306; (EE) 307.

UNION—(F) 309; (G & H) 0209; (K) 0307; (Q) 205; (AA) 209; (BB) 307.

1919-20-21 (F-2½ Ton)—(A) Bk. N310; (B) Nbk. 308.

1919-20 (H-4 Ton)—Tim. Brgs.; (A) 5554-5520; (B) 5354-5320; (G & H) 456-452; (J) 3554, 3520; (K) 460-452; (GG) Hy, 29097.

UNITED ENGR. CO.—1920—(A) Br. 317TX; (B) Br. 235TX; (D & E) Br. 208AX.

UNITED MOTORS—1917 (5 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354B-5320; (D) Bower, 319NDT; (D, C & H) 780-772; (E) 6552-6521; (J & K) 6359-6320.

1919-20 (Mod. A)—(A) Tim. 3762-3720; (B) Tim. 3360-3320; (D) Hy, 16670; (E & J) 307DR; (G & H) Hy, 26069; (K) Hy, 26668; (N) 307; (O) 205; (Q) 209; (AA) Tim. 277-274; (BB) Tim. 339-333; (CC) Tim. 235; (DD & EE) 306-303; (GG) Spec.

1919-20 (Mod. B)—(A) Tim. 3702-3720; (B) Tim. 3360-3320; (D) Hy, 26662; (E) 308DR; (G & H) Hy, 26057; (J) 307DR; (K) Hy, 26777; (O) 205; (Q) 209; (AA) Tim. 337; (BB) Tim. 339; (CC) Tim. 306; (DD & EE) Tim. 319; (GG) Spec.

1919-20 (C)—(A) Br. 312; (B) Br. 311; (D) Hy, 17897; (E) 410DR; (G & H) Hy, 26480; (I) SKF. 709; (J) 310DR; (K) Hy, 26669; (O) 205; (Q) 209; (AA) Tim. 337; (BB) Tim. 339; (CC) Tim. 306; (DD & EE) Tim. 319; (GG) Spec.

1919-20 (V)—(A) Br. 312; (B) Br. 311; (D) 318-DR; (E) Hy, 17897; (G & H) Hy, 26480; (I) SKF. 709; (J) 310DR; (K) Hy, 26669; (O) 205; (AA) Tim. 439; (BB) Tim. 435; (CC) Tim. 335; (DD & EE) Tim. 415.

U. S. TRUCK—1913-14-15-16 (E 2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D) 5563-5520; (E) 4554-4520.

1918 (Army AA)—(O) 205; (P) 308; (Q) 0210; (AA) 308; (BB) 308; (DD) 308; (EE) 307; (GG) 304.

1918 (Army A)—(G & H) 0310; (J) 308; (K) 406; (O) 205; (P) 308; (Q) 0210; (AA) 309; (BB) 309; (DD) 307; (EE) 308; (GG) 304.

1918 (Mod. B)—(O) 205; (P) 308; (Q) 0210; (AA) 311; (BB) 410; (DD) 407; (EE) 405; (GG) 304.

1920-21 (N)—(A) Tim. 435-4320; (B) Tim. 3191-3120; (D) Hy, 16670; (E, J) 307DR; (G & H) Hy, 16669; (I) 234-E; (K) Hy, 26668; (O) 205; (Q) 209; (AA) Tim. 277; (BB) Tim. 339; (CC) Tim. 235; (DD & EE) Tim. 306; (GG) Hy, 29097.

1920-21 (NW)—(A) Tim. 435-4320; (B) Tim. 3191-3120; (F) Br. 311; (I) 215; (J) 407; (K) 408DR; (O) 205; (Q) 209; (AA) Tim. 277; (BB) Tim. 339; (CC) Tim. 235; (DD & EE) Tim. 306; (GG) Hy, 29097.

1920-21 (R)—(A) Bk. 310; (B) Bk. 308; (F) 314; (I) 217; (J & K) 408; (M) 3107-D; (O) 205; (P) 208; (Q) 209; (AA) Tim. 337; (BB) Tim. 339; (CC) Tim. 306; (DD & EE) Tim. 319; (GG) Hy, 29097.

1920-21 (S)—(A) Bk. 312; (B) Bk. 311; (F) Br. 317; (I) 219; (J) 409; (K) 413; (O) 205; (P) 208; (Q) 209; (AA) Tim. 336-319; (BB) Tim. 357; (CC) Tim. 306; (DD & EE) Tim. 339; (GG) Hy, 29097.

1920-21 (T)—(A) Bk. 312; (B) Bk



## VELIE—Continued

1916 (Mod. X)—Tim. Brgs. (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-552; (AA) 439-4320; (BB) 440-4320; (CC) 335 cone; (DD & EE) 415-412.  
 1916-17 (3 Ton)—Tim. Brgs. (G & H) 395-3920; (J) 337-3320; (K) 440-4320.  
 1917 (25 1/2 Ton)—Tim. Brgs. (A) 3750-3720; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-552; (AA) 337-3320; (BB) 339-333; (CC) 306 cone; (DD & EE) 319-313.  
 1917 (26 2-Ton)—Tim. Brgs. (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J & K) 559C-552; (AA) 336-3320; (DD & EE) 415-412.  
 1917 (27)—(A) Tim. 337-3320; (B) Tim. 236-2320; (D) Tim. 435T-4320; (G & H) Tim. 375T-3720; (J) Tim. 255-2530; (K) Tim. 417-412; (O) 205; (AA) 210; (BB) 307; (DD & EE) 305.  
 1917 (28)—Tim. Brgs. (A) 257-2520; (B) 235-2320; (D) 415T 412; (G) 288-284; (H) 355-3520; (J) 334-3320; (K) 258-2520; (O) 205.  
 1918 (38)—Tim. Brgs. (A) 317-312; (B) 2382-2320; (D & E) 415T-412A; (G & H) 355-3520; (J) 257-2520; (K) 3381-3320; (O) 205; (AA) 209; (BB) 307.  
 1918 (39 Sport)—Tim. Brgs. (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (O) 205; (AA) 210; (BB) 307; (DD & EE) 305.  
 1918 (25B)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-552.  
 1919-20 (38)—Tim. Brgs. (A) 317-312; (B) 2382-2320; (D & E) 415T-412A; (G & H) 359T-3520; (J) 257-2520; (K) 3381-3320; (GG) Hy. 29097.  
 1919—(39-24 Spec.)—(GG) Hy. 29097.  
 1919 (46)—(D & E) 311DR; (O) 205; (Internal Pinion) 407.  
 1920 (34)—(O) 205; (AA) 209; (BB) 306.  
 1920 (46)—(D & E) 311DR; (G) Tim. 3762-3720; (H) Tim. 375-3720; (J) Tim. 335-3320; (K) Tim. 4368-4320; (O) 205; (AA) 209; (BB) 306.  
 1920 (48)—Tim. Brgs. (A) 317-312; (B) 2687-2620; (D & E) 415T-412A; (D & E) 415T-412A; (G & H) 359S-3520; (J) 2785-2720; (K) 3381-3320; (O) 205; (AA) 209; (BB) 307.

VIALL—1917 (2 Ton)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-552.

VICTORY—1920 (V-B-L)—(D, E, G & H) Hy. 16079:80; (J) Hy. 26620.

VIM—1917 (1,000 lbs.)—(F) Hy. 16691; (G & H) Hy. 26227; (J) Tim. 319-312; (K) Tim. 348-3320; (AA) Hy. 17798.  
 1919—(1/2 Ton)—(D & E) Hy. 16691; (G & H) Hy. 26227; (GG) Hy. 29097.  
 1920 (25-1, 22-2 23-Ton)—(GG) Hy. 29097.  
 1920 (27-1/2 Ton)—(AA) Hy. 17798; (CC) Hy. 18820; (GG) Hy. 29097.

VOGUE—1920-21 (A) Br. 336TXL; (B) Br. 236TX; (F) 310DR; (G & H) Tim. 366-363; (J) 307DR; (K) Hy. 57883; (CC) Hy. 56972.

VOLTZ BROS.—1914 (5)—Tim. Brgs. (A) 5550-5520; (B) 5351-5320; (C) 5354M-5320; (D) 6550-6520; (E) 6354-6321; (G) 375-3720; (H) 395-3920.

WALKER-JOHNSON—1920 (B-2 1/2 Ton)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (O) 205; (P) 208.

WALTER TRUCK—1918-19 (B)—Tim. Brgs. (A) 5550-5520; (B) 5351-5320; (D) 6554-6521; (E) 861-852; (G & H) 477-473.  
 1918-19 (C-4WD)—Tim. Brgs. (A & D) 6450-6420; (B & E) 5551-5520; (G & H) 477-473.  
 1919-20-21 (S)—Tim. Brgs. (A) 5550-5520; (B) 5355-5320; (D) 6550-6520; (E) 5350-6321; (G & H) 477-473; (J) 439-4320; (O) 205; (P) 208DR; (Main Shaft Front) 211DR; (AA) 212DR; (BB) 309; (CC) Hy. 27988; (DD & EE) 308DR.

WALTHAM—1920 (E-1 1/2 Ton)—(A) 308DR; (J) 407; (K) 410DR; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306.

WARD—1913-14-15-17 (E-D)—Tim. Brgs. (A) 5558-5520; (B & D) 6453-6420; (E) 6552-6521.

1913-14-15 (E-C)—Tim. Brgs. (A) 4554-4520; (B & D) 5558-5520; (E) 6453-6420.  
 1913-14-15 (E-B)—Tim. Brgs. (A & D) 4554-4520; (B) 3354-3320; (E) 5558-5520.  
 1913-14-15 (E-A)—Tim. Brgs. (A & D) 3554-3520; (B) 2762-2720; (E) 4554-4520.  
 1914 (Gas Car)—Tim. Brgs. (A) 259-2520; (B) 235-2320; (D & E) 355-3520; (G & H) 375-3720; (J) 258-2520; (K) 415-412.  
 1915-16-17 (W-S)—Tim. Brgs. (A) 317-312; (B) 1751-1730; (D & E) 415T-414; (G & H) 365-363; (J) 237-233 (1917 Mod. uses 236-233); (K) 317-312.  
 1917 (E-A)—Tim. Brgs. (A & E) 3554-3520; (B) 3362-3320; (D) 4554-4520.  
 1917 (E-B)—Tim. Brgs. (A & E) 4554-4520; (B) 3554-3520; (D) 5558-5520.  
 1917 (E-C)—Tim. Brgs. (A & E) 5558-5520; (B) 4554-4520; (D) 6453-6420.  
 1917 (E-D)—Tim. Brgs. (A & E) 3362-3320; (B) 2654-2620; (D) 3554-3520.

WARD LA FRANCE—1919 (2A)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559-552; (J & K) 539E-532; (GG) Hy. 29097.

1920—(2B, 2 1/2, 4A-3 1/2, 5A-5 Ton)—(GG) Hy. 29097.

WATSON—1917 (5-Ton Tractor)—Tim. Brgs. (A) 4550-4520; (B) 4361-4320; (D) 6552-6521; (C) 443B-4320; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6369C-6320; (AA) 439-4320; (BB) 435-5320; (DD & EE) 415-412.  
 1920 (A) Bk. 418; (B) Bk. 257; (C) Spec.; (F) 309DR; (G & H) 211; (J) 307; (K) 307DR; (O) 205; (P) 277; (Q) 209; (BB) Tim. 339; (CC) Tim. 235; (DD & EE) 306.  
 1920 (U)—Tim. Brgs. (A) 4550-4520; (B) 4361-4320; (C) 443B-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5756-5720; (J) 559C-552; (K) 6359-6320; (O) 205; (P) 440; (Q) 209; (AA) 435; (BB) 335; (DD & EE) 415; (KK & LL) Spec.

WAVERLY—1913-14-15 (13-83-98-90)—Tim. Brgs. (A) 418-412; (B) 316-312; (D) 375-3720; (E) 355-3520.

1913-15 (83-97-99-109)—Tim. Brgs. (A) 418-412; (B) 316-312; (D) 395-3920; (E) 375-3720.

1912-13-14 (83-96)—Tim. Brgs. (A & D) 355-3520; (B) 315-312; (E) 276-2720.

1914 (1 Ton)—Tim. Brgs. (A) 3750-3720; (B & E) 3360-3320; (C) 341-3320; (D) 4558-4520; (G & H) 375-3720; (J) 256-2520; (K) 415-412.

1915 (3 Ton)—(A & D) Tim. 3955-3920; (B & E) 3762-3720.

WESTCOTT—1915 (U-50)—Tim. Brgs. (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (O) ND. 0305; (AA) ND. 212; (BB) ND. 307.

1916 (Large 6)—Tim. Brgs. (A) 337-3320; (B) 236-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412.

1917 (S-17 Large 6, Small 6)—Tim. Brgs. (A) 3381-3320; (B) 2382-2330; (D) 435T-4320; (G & H) 375T-3720; (J) 255-2530; (K) 417-412; (AA) 277-274; (BB) 339-333; (DD & EE) Hy. 17799.

1917 (42 & 51)—(AA) 210; (BB) 307; (DD & EE) 206.  
 (Mod. 41-42 43-6)—(A) Tim. 337-3320; (B) Tim. 236-2330; (J) 255-2530; (K) 417-412; (O) Fafair, 205A; (AA) 210; (BB) 307; (DD & EE) 206.

1918 (Ser. 18)—(O) 205; (AA & BB) 306; (DD & EE) Hy. 17799.

1919 (C-38)—Tim. Brgs. (A) 317-312; (B) 2687-2620; (D & E) 415T-412A; (G & H) 359S-3520; (J) 2785-2720; (K) 3381-3320; (O) 205; (Q) 460; (AA) 209; (BB) 306DR; (DD & EE) Hy. 17012; (KK & LL) Spec.

1919 (C-48)—Tim. Brgs. (A) 415-412; (B) 2382-2330; (D & E) 458T-454; (G & H) 377-3720; (J) 3196-3120; (K) 439T-432; (O) 205; (Q) B & B 460; (AA) 277-274; (BB) 339-333; (DD & EE) 306; (KK & LL) Spec.

WESTERN 1918 (All Mod.)—(D & E) Tim. 861-852.

WHITE—(Mod. ATC) (A) 313; (B) 309; (D) 416; (E) 410; (J) 313; (Q) 302; (W) 410; (Y) 412.

(T-C 5-Ton)—(A) 313; (B) 309; (D) 416; (E) 410; (G) 315; (H) 0315; (J) 310; (K) 407; (N) 307; (Q) 302; (W) 410; (Y) 412; (AA) 212; (BB) 307; (CC) 308.

(GBBE 3/4-Ton)—(A) 309; (B) 308; (D & E) 313; (J) 407; (K) 310; (O) 206; (Q) 302; (W) 410; (Y) 412; (GG) 304.

(GAD Touring)—(A) 307; (B) 304; (D) 309; (J) 307; (K) 404; (Q) 00134; (W) 410; (Y) 412; (BB) 307; (GG) 305.

(Mod. TCB)—(D) 317; (E) 315; (J) 310; (K) 406; (Q) 302; (W) 410; (GG) 304.

(Mod. GEC)—(W) 413; (Y) 414; (GG) 304.

(Mod. T-C)—(A, G & H) 315; (B) 309; (D) 416; (E, W) 410; (J) 310; (K) 407; (Spracket Shaft) 313; (Y) 412; (Universal Joint) 307; (BB) 212; (CC) 306; (DD) 405; (EE) 307.

1920 (15-15A)—(A) 309; (B) 306; (F-G-H) 313; (K) 407; (L-W) 410; (Q) 302; (Y) 412-414; (AA-DD-EE) 307; (BB) 310; (CC) 206-C; (GG) 304; (HH) 405.

1920 (15x45)—(A) 309; (B) 306; (F) 317; (G-H) 313-B; (K) 407; (L) 410; (Q) 211; (AA) 307; (CC) Tim. 3196-3120; (DD-EE) 308; (GG) 305.

1920 (20-20)—(A) 309; (B) 306; (F) 317; (G-H) 315-B; (K-M) 407; (L) 310; (Q) 302; (W) 410; (Y) 412; (AA-DD-EE) 307; (BB) 310; (CC) 206-C; (GG) 304; (HH) 405.

1920 (20-45)—(A) 311; (B-DD-EE) 308; (F) 317; (G-H) 315-B; (K-M) 407; (L) 310; (Q) 211; (CC) Tim. 3196-3120; (GG) 305.

1920 (50)—(A) 310; (B-DD-EE) 308; (F) 417; (G-H) 315-B; (K) 410; (L) 310; (M) 407; (Q) 211; (AA) 307; (CC) Tim. 3196-3120; (GG) 305.

1920 (40-40)—(A-G-H) 313; (B) 309; (D) 320; (E) 321 spec.; (G-H) 313; (I) Spec.; (L) 310; (M) 407; (Q) 211; (AA) 307; (CC) Tim. 3196-3120; (DD-EE) 308; (GG) 305.

1920 (45-45)—(A) 315; (B) 311; (D) 322; (E) 321 spec.; (G-H) 313; (I) Spec.; (L) 310; (M) 407; (Q) 211; (AA) 307; (CC) Tim. 3196-3120; (DD-EE) 308; (GG) 305.

WHITE HICKORY—1918-19 (Mod. H)—(A) Tim. 4558-4520; (B) Tim. 3360-3320; (D & E) Tim. 5553-5520; (G & H) Tim. 559C-552; (J & K) Tim. 539C-552; (O) 205; (P) 307; (Q) 1212; (S) 205; (T) Cont. Motor 6HG-206; (U) Cont. Motor 6HG-208; (V) Cont. Motor 6HG-207; (AA & BB) 307; (CC) 304; (DD) 305; (EE) 306; (FF) Fuller & Sons Rolle4 1023; (KK & LL) BK 23, Ball Brgs.

1920 (E-1 Ton)—Tim. Brgs. (A) 4364-4320; (B) 3161-3120; (F) 539TD-532; (G) 397-3920; (J) 444-432; (K) 456-453; (O) 205; (P) 307; (Q, GG) Spec.; (AA) 304; (BB) 307; (DD) 305; (EE) 306.

1920 (H-1 1/2 Ton)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (F) 6378-6320; (G) 477-473; (J) 456-453E; (K) 539E-532; (O) 205; (P, BB) 307; (Q, GG, KK & LL) Spec.; (AA) 304; (DD) 305; (EE) 306.

1920 (K-2 1/2 Ton)—Tim. Brgs. (A) 4558-4520; (B) 3360-3320; (DD & EE) 5557-5520; (G) 559-552; (J & K) 539E-532; (O) 205; (P, BB) 308; (Q, GG) Spec.; (AA) 304; (DD & EE) 306.

WHITNEY—1919 (9-18)—(S) Hy. 17174-3974; (AA) Tim. 5565-5520; (BB) Tim. 435-432; (DD & EE) Tim. 440-432; (GG) Hy.

WICHITA—1917-18 (O 3 1/2 Ton)—(D) Bower, 317NDT SF  
 1917-18 (Q 5 Ton)—(D) Bower, 319NDT SF.

1919-20-21 (1 1/2 Ton)—(A) Bk. N310; (B) Bk. N308; (AA) Hy. 27794; (BB) Hy. 26733; (DD & EE) Hy. 16516; (GG) Hy. 29097.

1919-20-21 (2 1/2 Ton)—(A) Bk. N310; (B) Bk. N309; (AA) Hy. 27794; (BB) Hy. 26733; (DD & EE) Hy. 16516; (GG) Hy. 29097.

1919-20-21 (3-3 1/2 Ton)—(A) Bk. N312; (B) Bk. N311; (CC & FF) Hy. 26839; (GG) Hy. 19080.

WILCOX TRUX—1913-14-15 (L 1-Ton)—Tim. Brgs. (A) 3750-3720; (B & E) 3360-3320; (D) 4558-4520; (G, H & AA) 375-3720; (BB, DD & EE) 335-3320.

1913-14-15 (J 3-Ton)—Tim. Brgs. (A) 4550-4520; (B) 4361-4320; (C) 443-432; (D) 6356-6321; (E) 5355-5320; (G & H) 375-3720; (AA, BB, DD & EE) 337-3320, some models use (AA) 375-3720; (BB, DD & EE) 335-3320.

1916-17 (P 3 1/2 Ton)—(AA & BB) Tim. 419-412; (DD & EE) Tim. 415-412.

1916-17 (R 1 1/2 Ton)—(AA) Tim. 336-3320; (DD & EE) Tim. 335-3320.

1916-17 (Q 2-Ton)—(AA) Tim. 336-3320; (DD & EE) Tim. 335-3320.

1917 (V-3/4, S 1-Ton)—(AA) Tim. 277-274; (BB) 339-333.

1917-18 (P 3 1/2 Ton)—(D) Bower, 317 NDT SF.

1918 (E 5 Ton)—(D) Bower, 319NDT SF.

1918 (U-3, S-1 Ton)—(AA) Tim. 277-274; (BB) Tim. 339-333.

1918 (N-1 1/2, Q2 Ton)—(AA & BB) Tim. 336-3320; (DD & EE) Tim. 335-3320.

1918 (P3 1/2 Ton)—(AA & BB) Tim. 419-412; (DD & EE) Tim. 415-412.

1918 (W-5 Ton)—(AA & BB) Tim. 447-4320; (DD & EE) Tim. 415-412.

1920 (AA Mod.)—(A) Tim. 435-4320; (B) 3191-3120; (AA) Tim. 277-274; (BB) Tim. 339-333.

1920 (B & C)—Tim. Brgs. (A) 4554-4520; (B) 3360-3320; (AA & BB) 336-3320; (DD & EE) 335-3320.

1920 (E)—Tim. Brgs. (AA & BB) 447-4320; (DD & EE) 415-412.

1919 (A & B)—(F) 2-311; (G & H) 213; (J & K) 407; (DD & EE) 306.

1919 (C-2 1/2 Ton)—(F) 315DR; (G & H) 214; (J) 310; (K) 410DR.

1919 (W)—(A) 315DR; (B) 314DR; (F) 319DR; (G & H) 219; (J) 409; (K) 410.

1919 (D)—(F) 317DR; (G & H) 219DR; (J) 409; (K) 410DR.

WILLIS, KNIGHT & OVERLAND—1915 (81)—(A) Tim. 256-2520; (B) Tim. 1751-1730 (F) Hy. 16779; (G & H) Hy. 26056; (AA) 208; (BB) 307; (DD & EE) 305.

1915 (80)—(A) Tim. 256-2520; (B) Tim. 235-2320; (F) Hy. 16779; (G & H) Hy. 26056; (AA) 208; (BB) 307; (DD & EE) 305.

1915 (82)—(A) Tim. 335-3320; (B) Tim. 235-2320; (D & E) Tim. 365-363; (G & H) Tim. 375-3720; (AA) 210; (BB) 307; (DD & EE) 305.

1915 (W-19)—(D) 310; (E) 210; (G & H) 0311; (K) 0407; (AA) 209; (BB) 307; (CC) 305; (DD & EE) 306.

1916 (75)—(F) 308; (G & H) 0208; (AA) 208; (BB) 306; (DD & EE)



## WILSON—Continued

1920 (E.A.)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (O) 205; (P) 208; (AA) 209; (BB) 309; (CC & FF) Spec.; (DD) 306; (EE) 307.  
 1920 (G)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375E-6323; (O) 205; (P) 208; (Q, CC, FF) Spec.; (AA) 209; (BB) 309; (DD) 306; (EE) 307.  
 1920 (H)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D, G & H) 780-772; (E) 6552-6521; (J) 7375E-6323; (K) 6455E-6422; (O) 205; (P) 208; (Q, CC, FF) Spec.; (AA) 210; (BB) 310; (DD) 307; (EE) 308.

\*WINTHER—1917 (47), 1918 (48)—(A) Tim, 4558-4520; (B) Tim, 3360-3320; (D) Hy, 26665; (E) 308; (G & H) Hy, 26057; (I) SKF, 709; (J) 307; (K) Hy, 26777; (Spur Gear) Hy, 17791; (O) 1205; (AA) Tim, 419-412; (BB) Tim, 357-353; (CC) Tim, 336-3320; (DD & EE) 339-333 (Mod. 47 uses (AA) 307; (BB) 211; (CC) 307; (DD & EE) 306); (GG) Hy, 29097.  
 1917 (67)—(A) Tim, 4550; (B) Tim, 4361; (D) Hy, 17897; (E) 410; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) Hy, 17791; (O) 205; (AA) 1308; (BB) 212; (CC) 308; (DD & EE) 306; (GG) Hy, 29097.  
 1917 (87)—(A) Tim, 4550; (B) Tim, 4361; (D) Hy, 47894; (E) 411; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) 410; (O) 205; (AA) 309; (BB) 213; (CC) 309 (DD & EE) 307; (GG) Hy, 29097.  
 1917 (127)—(A) Tim, 5550; (B) Tim, 5351; (D) 318; (E) Hy, 17897; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) 410; (O) 205; (AA) 1310; (BB) 215; (CC) 310; (DD & EE) 308; (GG) Oakes, ME-3.  
 1918 (68)—(A) Tim, 4550; (B) Tim, 4361; (D) Hy, 17897; (E) 410; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) SKF, 2310; (O) 1205; (AA) Tim, 419; (BB) Tim, 357; (CC) Tim, 336; (DD & EE) Tim, 339; (GG) Hy, 29097.  
 1918 (88)—(A) Tim, 4550; (B) Tim, 4361; (D) Hy, 47894; (E) 411; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) 410; (O) 205; (AA) Tim, 439; (BB) Tim, 435; (CC) Tim, 335; (DD & EE) Tim, 415; (GG) Oakes, ME-3.  
 1918 (108)—(A) Tim, 5550; (B) Tim, 5351; (D) 318; (E) Hy, 17897; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) 410; (O) 205; (AA) Tim, 439; (BB) Tim, 435; (CC) Tim, 335; (DD & EE) Tim, 415; (GG) Oakes, ME-3.  
 1918 (128-148)—(A) Tim, 5550; (B) Tim, 5351; (D) 318; (E) Hy, 17897; (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) 410; (O) 205; (AA) Tim, 439; (BB) Tim, 435; (CC) Tim, 335; (DD & EE) Tim, 415; (GG) Oakes, ME-3.  
 1918 (468)—(A) Bower, 311; (B) Bower, 308; (D) Hy, 17897; (E) 4100 (G & H) Hy, 26480; (I) SKF, 709; (J) 310; (K) Hy, 26669; (Spur Gear) SKF, 2310; (Front Axle Spur Gear) 308; (O) 205; (AA) Tim, 419; (BB) Tim, 357; (CC) Tim, 336; (DD & EE) Tim, 339; (GG) Oakes, ME-3.  
 1919 (39)—(A) Br, 435; (B) Br, 318; (D) Hy, 46670; (E) 307DR; (G & H) Hy, 26069; (I) Clark 234E; (K) Hy, 26668; (N) 309; (O) 205; (Q) 212; (AA) 304; (BB & CC) 307; (DD) 305; (EE) 306; (FF) Fuller 1023; (GG) Oakes C-1161.  
 1919 (49-979)—(A) Tim, 4554-4520; (B) Tim, 3381-3320; (D) Hy, 26662; (E) Br, 308DR; (G & H) Hy, 26057; (I) Clark 53E; (J) 307DR; (K) Hy, 26777; (O) 205; (AA) 306 Cone; (BB) Tim, 357-353; (CC) Tim, 336-3320; (DD & EE) Tim, 339-333.  
 1919-20 (109, 140)—(A) Tim, 5550-5520; (B) 5351-5320; (D) Br, 318NDT; (E) Hy, 17987; (G & H) Hy, 26480; (I) 709; (J) 310DR; (K) Hy, 26669; (O) 205; (Q) B & B 10075; (AA) Tim, 335; (BB) Tim, 435-4320; (CC) Tim, 439-4320; (DD & EE) Tim, 415-412; (GG) Oakes C-2802.  
 1919-20 (69, 70)—(A) Tim, 4550-4520; (B) Tim, 4361-4320; (D) Hy, 17897; (E) Br, 410NDT; (G & H) Hy, 26480; (I) 709; (J) 310DR; (K) Hy, 26669; (O) 205; (Q) B & B 2149; (AA) Tim, 306; (BB) Tim, 357-353; (CC) Tim, 336-3320; (DD & EE) Tim, 339-333; (GG) Oakes C-2802.  
 1919 (479)—(A) 311; (B) 308; (D) Hy, 17897; (E) Br, 410NDT; (G & H) Hy, 26480; (I) 709; (J) 310DR; (K) Hy, 26669; (O) 205; (Q) B & B 10075; (AA) Tim, 335; (BB) Tim, 435-4320; (CC) Tim, 439-4320; (DD & EE) 415-412; (GG) Oakes ME-3.  
 920 (430)—(A) Hy, 46670; (B) E & J 307DR; (D) Hy, 46670; (G & H) Hy, 26064 or Bk, 375; (I) Clark 234E; (K) Hy, 26668; (O) 205; (Q) 212; (AA, BB, CC) 307; (DD) 305; (EE) 306; (FF) Fuller 1023; (GG) Oakes C-1161.  
 920 (450)—(A) Hy, 46670; (B) 307DR; (D) Hy, 26662; (E) Br, 308; (G & H) Hy, 26057 or Bk, 375; (I) Clark 53E; (J) 307; (K) Hy, 26777; (O) 205; (Q) 212; (AA) 208; (BB) 307; (CC) 304; (DD) 305; (EE) 306; (FF) Fuller 1740; (GG) Oakes C-1161.  
 1921 (751)—(A) Tim, 3381-3320; (B) Tim, 2687-2620; (D) Tim, 420-413; (E) Tim, 319-313; (G) Tim, 279-270; (H) Bk, 336; (J) Tim, 275-270; (K) Tim, 335-3320 (O) 205; (Q) Warner X3806; (AA) Hy, 27992; (BB) 306; (CC) 209; (DD & EE) Hy, 17012.  
 1921 (Car 61)—(A) Tim, 335-3320; (B) Tim, 235-2320; (F) R. 309; (G, H & I) Tim, 375-3720; (J) 307; (K) R. 407; (O) 205; (Q) Warner X3806; (AA) Hy, 27992; (BB) 306; (CC) 209; (DD & EE) Hy, 17012; (GG) Oakes C-1161.

WINTON—1909-10-11-12-13-14—Tim. Brgs.; (A) 3361-3320; (B) 2553-2520; (C) 2758-2720; (D) 4553-3520; (E & J) 3762-3720; (G & H) 3955-3920; (K) 4350-4320.  
 1915-16 (21A, 22A)—Tim. Brgs.; (A) 337-3320; (B) 236-2320; (D & E) 365-363 Ann, 210; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (O) DR. 205; (AA) 344-333 ND. 305; (BB) 339-333 Ann, 307; (CC) Ann, 306; (DD & EE) Ann, 306; (GG) Ann, ND. 04.

(Mod. 20-48 HP.)—(P) 210; (AA) 304; (BB) 310; (DD & EE) 307.  
 (Mod. 17-D, 6-48)—(O) 305; (P) 210; (R) 308; (AA) 304; (BB) 310; (CC) 305; (DD & EE) 307.  
 (Mod. 21)—(O) 305; (P) 210; (R) 308; (AA) 304; (BB) 310; (DD, E) 307.  
 1916 (22 Large 6)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656B-3620; (D & E) 375-3720; (G) 456-454; (H) 559-552; (J) 439-4320; (K) 539-532; (O) ND. 205; (Q) DR. 308; (AA) 337-3320, DR. 305; (BB) 339-333, Ann, 308; (CC) Tim, 306 cone; (DD & EE) 319; 313, DR. 307; (GG) ND. 04.

1917 (22A)—Tim. Brgs.; (A) 3381-3320; (B) 2382-2320; (D & E) 365-363; (G) 375-3720; (H) 456-4520; (J) 317-312; (K) 440-4320; (AA) 344-333; (BB) 339-3320.  
 1917 (Large 6-22)—Tim. Brgs.; (A) 419-412; (B) 316-312; (D & E) 375-3720; (G) 456-4520; (H) 559-552; (J) 439-4320; (K) 539-532; (AA & BB) 357-353.  
 1917 (Large 6-8T)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3650-3620; (D) 4553-4520; (E) 3762-3720; (G) 559-552; (H) 456-454; (J & K) 539-532; (AA) 344-333; (BB) 339-333.  
 1919-20-21 (25)—Tim. Brgs.; (A) 419-412; (B) 316-312; (C) 3656-3620; (D & E) 375-3720; (G) 456-4520; (H) 559-552; (J) 439-4320; (K) 539-532; (O) 205; (P) 306; (Q) 209; (AA & BB) 344-333; (DD & EE) 306; (GG) 204; (KK) 211, (LL) 12004.

WISCONSIN—1919-20 (Dairy Truck)—Tim. Brgs.; (A) 317-312; (B) 235-2320; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412.  
 1920 (Luverne 2-3 Ton)—Tim. Brgs.; (D) 4559-4520; (E) 3190-3120; (G & H) 355-3520; (J) 335-3320; (K) 417-412.

WITT-WILL—1914 (2½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 5563-5520; (E) 4365-4320; (G & H) 375-3720.  
 1914 (4½ Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5351-5320; (C) 5354-5320; (D) 6356-6321; (E) 5355-5320; (G & H) 375-3720; (AA) 439-4320; (BB) 335-3320; (DD & EE) 415-412.  
 1916 (1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.  
 1916 (B Special)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341B-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.  
 1917 (R 4 Ton)—Tim. Brgs.; (A) 5550-5520; (B) 5350-5320; (C) 5354-5320; (D) 6550-6521; (E) 6350-6321; (G) 4553-4520; (H) 4353-4320; (J) 5356-5320; (K) 455-4520; (AA, DD & EE) 4364-4320; (BB) 4553-4520.  
 1917 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559-552; (H) 456-454; (J & K) 539-532; (AA & BB) 335-3320; (CC) 257 cone; (DD & EE) 316-312.

1917 (2 Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 5563-5520; (E) 4354-4320; (G & H) 375-3720; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257 cone.  
 1917 (4 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) 257 cone.  
 1918 (W-D-1-18, 2-18)—Same as 1917 two ton mod.  
 1919 (WD 1-19, WD 2-19)—Same as 1917 two ton mod.  
 1919-20 (21 N)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (F) 6378-6320; (G & H) 477-463; (J & L) 456-453; (K & M) 539E-532; (O) 205; (P) 209; (AA) 337-3320; (BB) 335-3320; (CC) 306; (DD & EE) 316-412; (GG) Oakes C-1502.  
 1919-20-21 (P)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 5557-5520; (G & H) 559-552; (J & L) 539E-532; (K & M) 5578E-5521; (O) 205; (P) 209; (AA) 337-3320; (BB) 335-3320; (CC) 306; (DD & EE) 316-412; (GG) Oakes C-1502.

WOLVERINE—1918 (1½ Ton)—(H) Hy, 26219.  
 1919—(1½ Ton)—(G) Hy, 26219; (GG) Hy, 29097.  
 1920 (C1½ Ton)—(A) Tim, 435-4320; (B) Tim, 3191-3120; (G) Hy, 26219; (GG) Hy, 29097.  
 1920 (D-2 Ton)—(A) Tim, 3762-3720; (B) Tim, 3360-3320; (G) Hy, 26084; (H) 26085; (GG) Hy, 29097.  
 1920 (L-3½ Ton)—(A) Tim, 4553-4520; (B) Tim, 4365-4320.

WOODS DUAL POWER—1917 (Gas Elec.)—(A) Tim, 3381-3320; (B) Tim, 2382-2330

YALE—1917 (Mod. K)—Tim. Brgs.; (A) 337-3320; (B) 2382-2320; (E) 435T-4320; (G & H) 375T-3720; (J) 255-2520; (K) 417-412.

ZEITLER-KING CO.—1919 (4 Ton)—(GG) Hy, 29097.  
 1920 (1 Ton)—Tim. Brgs.; (A) 3362-3320; (B) 2382-2320; (GG) Hy, 29097.  
 1920 (K-Z 2½ Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (C) 341-3320; (D & E) 5557-5520; (G & H) 559-552; (J) 539E-532; (K) 5578E-5521; (AA) 337-3320; (BB) 339-333; (DD & EE) 319-312; (GG) Hy, 29097.  
 1920 (3½ Ton)—Tim. Brgs.; (A) 4550-4520; (B) 4361-4320; (C) 443-4320; (D) 6552-6521; (E) 5755-5720; (G & H) 5757-5720; (J) 559-552; (K) 6375E-6323; (AA) 337-3320; (BB, DD & EE) 335-3320; (CC) Hy, 29097.

ZEITLER & LAMSON—1916 (1 Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3360-3320; (D) 4553-4520; (E) 3762-3720; (G) 559C-552; (H) 456C-454; (J & K) 539C-532.  
 1916 (1½ Ton)—Tim. Brgs.; (A) 3750-3720; (B) 3760-3320; (D & E) 5553-5520; (G & H) 559C-552; (J & K) 539C-532.  
 1916 (2 Ton)—Tim. Brgs.; (A) 4558-4520; (B) 3360-3320; (D & E) 553-5520; (G & H) 559C-552; (J & K) 539C-532.

## New Atterbury Models Announced

The Atterbury Motor Car Co. of Buffalo, announces two new truck models of 2½-3-ton and 3½-4-ton capacity. These two new models follow the 1½-ton and 5-ton models which have been in production for some time.

The specifications give several important changes, all of which are standard equipment. Among these are found: Latest type K-4 and L-4 Continental engines with pressure feed lubrication and removable cylinder heads; Delco electric lighting equipment with generator; semi-enclosed all steel cabs with doors; built in glass windshields; left hand drive and center control; amidship transmissions, 4 speeds forward, 1 reverse; longer wheelbases; lower transmission gear ratios; new type hoods with removable side panels; polished aluminum radiators; combination radiator guards and bumpers; Alemite chassis lubrication systems; vacuum gasoline feed systems.

Rickenbacker Organizes Company to Finance Sales  
 Rickenbacker Co., Inc., Detroit, has been formed as a financing company for the Rickenbacker Motor Car Co. and will handle all financial business of the manufacturing company. This, according to B. F. Everitt, president of the manufacturing company,

applies to the handling of sales and such other business as may arise from time to time.

The capital stock of the financing company is \$100,000 at \$10 a share; \$10,000 paid in cash. Stockholders are E. V. Rickenbacker, 260 shares; B. F. Everitt, 260 shares; R. M. Chambers, 160 shares; R. H. Hood, 160 shares, and H. L. Cunningham, 160 shares.

## Penco Corp. Organized

All automotive products of the Penberthy Injector Co., as far as sales, advertising and market development is concerned, will be handled by the Penco Corp. which has opened offices at Detroit in the General Motors Building. The Penberthy company makes several well known parts and accessories for the automotive field, notable among these being the Ball and Ball carburetor, Penberthy re-atomizer, flo-meter and gasoline gauge. The officers of the Penco Corp. are Homer S. Johnson, president; Ivan A. McKenna, vice-president; Charles B. Johnson, secretary; and Carl Reese, treasurer.

A. G. McMillan, formerly director of sales of the Mitchell Motors Co. is now director of specialized sales of the Kardex Sales Co., of Tonawanda, N. Y.





**“Built by Westinghouse  
—you know it’s *right*”**

In engineering, in materials, in workmanship—  
Westinghouse Batteries must keep pace and  
faith with Westinghouse traditions.

Whether considering the long-lived, oversize  
Westinghouse Standard, or the differently  
designed, lower-priced Westinghouse Wubco  
Special, Westinghouse quality need never be  
questioned.

*The Westinghouse sales and service proposition  
has recently been made more attractive than ever.  
We invite inquiries from alert battery men.*

WESTINGHOUSE UNION BATTERY CO.  
Swissvale, Pa.

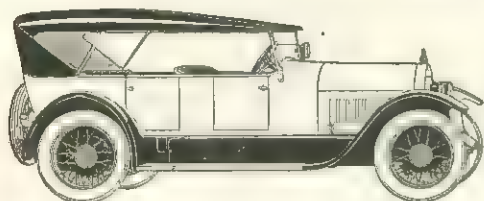
**WESTINGHOUSE**  
**BATTERIES**



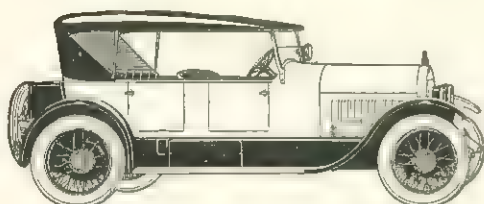




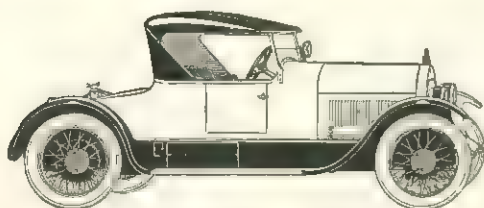
## Stutz Performance in a



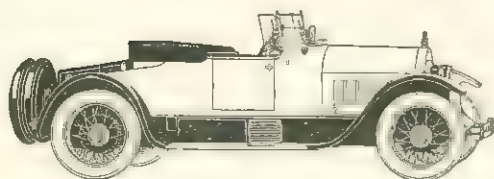
7-Passenger Touring, \$2640  
f. o. b. factory



4-Passenger Sportster, \$2790  
f. o. b. factory



3-Passenger Roadster, \$2450  
f. o. b. factory



Speedway Roadster, \$2760  
f. o. b. factory

That rare ability in action—the speed, the power, the acceleration and gratifying freedom from service attention traditional with the Stutz—intensified and refined beyond any previous point of excellence, is available now in a complete selection of choicest body creations of exclusive Stutz design.

The same sturdy, care-free dependability so characteristic of the Stutz mechanically, is typical of the coach work, also. Custom-built throughout, these advanced body styles match fully the acknowledged excellence of the Stutz chassis.

The Compensating Spring Suspension adds the final touch of desirability, endowing the cars with complete tranquility and composure at all speeds and on all roads, while steering, gear-shifting, brake and clutch action are exceptionally easy and responsive at all times.





## Car for Every Occasion

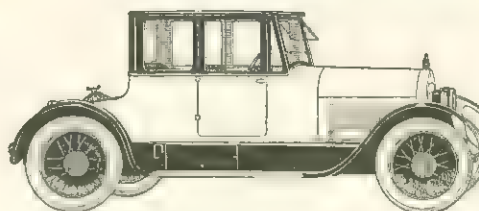
At their present phenomenal prices, Stutz cars today represent the greatest value ever offered by the company. For prestige, quality and intrinsic worth, they are not surpassed.

To the dealer keen to associate himself with a line of cars of distinctive appeal which enables him to conduct a business of highest character and unusual profit, the Stutz at this time presents possibilities of particular interest.

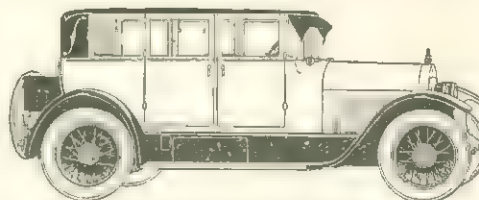
If you are not familiar with the new, complete Stutz line and are interested in knowing of the many other developments now rapidly maturing, write or wire, and we will be glad to furnish complete information.

# STUTZ

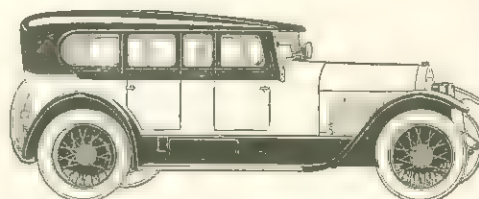
STUTZ MOTOR CAR COMPANY OF AMERICA, Inc.  
Indianapolis, Indiana, U. S. A.



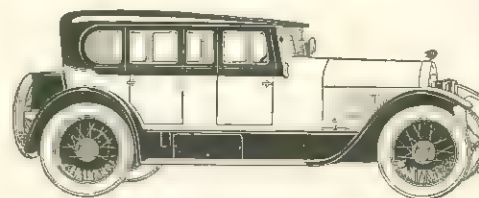
4-Passenger Coupe, \$3490  
f. o. b. factory



5-Passenger Sportsedan, \$4450  
f. o. b. factory



7-Passenger California Top, \$3015  
f. o. b. factory



4-Passenger California Top, \$3165  
f. o. b. factory





## The Sign of Satisfaction

The Hartford Battery Manufacturing Co.  
Milledale, Conn.

## SEPARATORS

The quality of our stock, the dependability of our service and our strict adherence to the careful manufacturing of only high grade insulating partitions from GENUINE PORT ORFORD CEDAR and CYPRESS materials are characteristics that will interest you.

**PRUITT-DEMING  
MANUFACTURING CO.**

Manufacturers of  
**Storage Battery Separators**

General Office and Factory  
**FRANKLIN, IND.**

## RIGHT NOW

WRITE FOR OUR NEW 138 PAGE CATALOG OF

Battery Repair Parts  
Battery and Electrical Service  
Station Equipment  
Replacement Parts for all ignition systems

*A Copy Is Ready For You — Gratis*

**W. F. PRICE BATTERY SUPPLY CO., Inc.**  
1620 North Broad Street Philadelphia, Penna.

## WITHERBEE

**Storage  
Batteries**

**Radio A  
Batteries**

TRADE  MARK

**Built Right Since 1903**

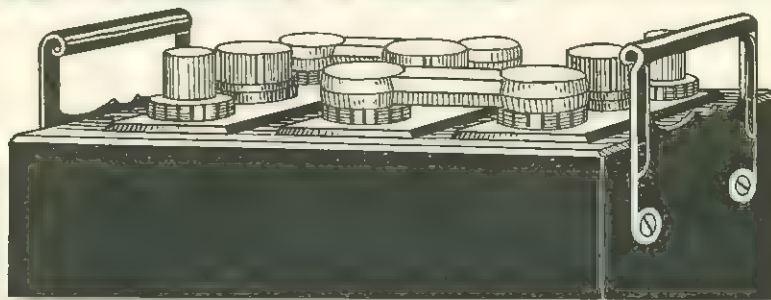
*Write for particulars of the Witherbee franchise*

**Witherbee Storage Battery Co., Inc.**  
234 W. 55th St. New York City



# YALE

## Super-Quality Storage Batteries



## Successful Dealers and Satisfied Customers

**B**EFORE you take on the sales agency for any battery, ask these two vital questions: Are other dealers making money selling it? Are car owners fully satisfied with the service it gives?

Apply these tests to YALE Batteries and you'll discover why they offer you the biggest battery dealer-opportunity that ever came your way.

Dealers who sell YALE Batteries are successful: *First*, because the batteries rank high in quality, service and length of life. *Second*, because the YALE Line offers sizes for all cars, and includes types to meet competitive prices. *Third*, because the sales policy gives dealers ample profit margins. *Fourth*, the guarantee means just what it says: "They MUST satisfy". *Fifth*, because substantial distributors give dealers full co-operation. *Sixth*, because the factory stands back of dealers in every adjustment, enabling them to please every user without delay or "red tape".

YALE Batteries are highly popular with car owners, because they insure quick starts and brilliant lights, and are exceptionally free from common weaknesses that cause trouble, shorten battery life, and result in expensive repairs and dissatisfaction.

If you are interested in making more money in the battery business—get in touch with us today.

### Built by Men Who KNOW the Battery Business

YALE Batteries are produced by some of America's leading automobile battery specialists—men who know the battery business, from every angle—men who know how to build a good battery, and sell it so that distributor and dealer get a fair profit and a square deal.

## Yale Storage Battery Company

Indianapolis, Ind., U. S. A.





# Announcing

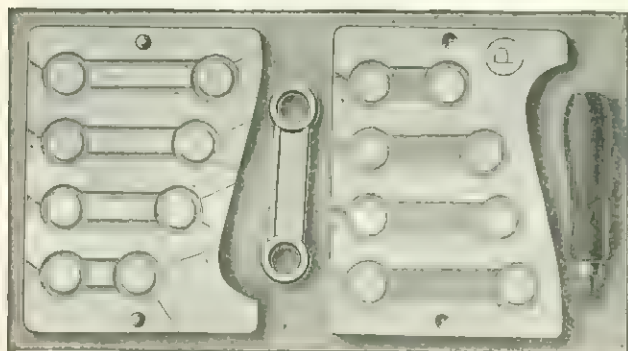
A NEW LINE OF

"O.P." Lead Molds

Speed Ladles  
Burning Racks

Dross Skimmers

Manufactured with the same superior quality that has made "O. P." Battery Terminals famous. Send for complete descriptive literature.



Cell Connector Mold

Type No. 6167

Four double tapered cell connectors of standard size can be cast at one time. Equipped with wood handle and special lug for clamping in vise.

*If You See ® They Are ®*

**THE OHIO PATTERN WORKS & FOUNDRY CO.**

2728 Spring Grove Ave.

Cincinnati, O.



**ELEMENTS**  
Shipped  
CHARGED

No burning up of plates.  
No long developing charge.  
One hour service to your customers on rebuilding jobs.

**DO  
YOU  
KNOW**

That you can have assembled groups reach you in a charged condition and thereby do away with a large part of the trouble and expense of rebuilding batteries? Cypress separators furnished to replace temporary shipping separators.

**Cut Your Rental Battery Investment In Half**

THE PRICE! Below what you pay for an equal quality of plates (discharged), post straps and separators, which must be assembled, burned up and developed.

**The Hazelett Storage Battery Company**

2133-57  
COLUMBUS ROAD



CLEVELAND  
OHIO

## SHONTZ EQUIPMENT

Includes Everything for the Battery and Electric Service Station. Write for Book Full of Information on Tools and Equipment. It May Save or Make YOU a Lot of Money.

**H. B. SHONTZ CO., Inc.**

165 West 64th St.

New York City

## COLD WEATHER COMING

You know what that means—Hard Starting, frequent battery recharging, rich mixture, sluggish motor and cranking when your battery is down. The

**Pomeroy Patented Electric Gasifier**

Costs only five dollars, and is guaranteed to overcome these troubles. Also to help on hills, increase mileage and last as long as the car.

Sold for four years in 38 States and Canada

Dealers—Write for special introductory offer.

PRIME WITH HEAT  
Packard, Franklin  
and Lincoln do.

**POMEROY ELECTRIC CO., Inc., Mfrs.**

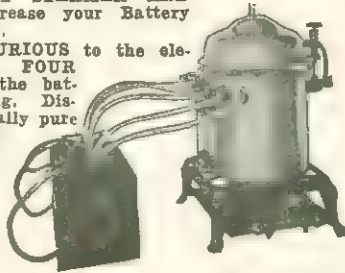
36 East Main Street

Rochester, N. Y.



## "IBSCO" Prices Reduced 25%

New low price (25% reduction) allows you to install an IBSCO BATTERY STEAMER AND STILL at little cost. Increase your Battery Business by using an IBSCO. Made of material NON-INJURIOUS to the elements or the electrolyte. FOUR MINUTES STEAMING and the battery is ready for dismantling. Distills about one gallon chemically pure water per hour. INCREASES PROFITS. Easy to install and operate. Write for more information and prices. Address



ILLINOIS BATTERY STEAMER CO.  
608 Spencer St., Peoria, Ill.

# S.O.S.

TRADE-MARK REGISTERED

## STORAGE BATTERIES

ARE WONDERS ON ALL CARS

BEST TO USE

BEST TO SELL

Our Pocket Battery Guide lists the right battery for all cars, and for Farm Light Plants.

Our Replacement Plates fit other makes of batteries. Repairmen prefer S.O.S. plates because they are fully formed. Send for Replacement List and Guide.

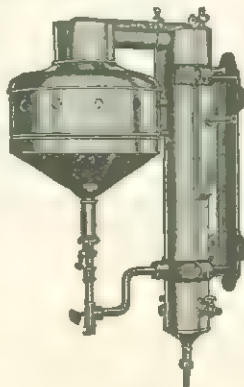
VICTOR STORAGE BATTERY COMPANY  
Fourth Avenue and Mississippi River. Rook Island, Ill.

We guarantee that S.O.S. Battery Plates will not sulphate injuriously.

## STORAGE BATTERIES THAT FAIL

Storage Battery Efficiency Demands Pure Water.

USE ONLY DISTILLED WATER FOR STORAGE BATTERIES. How many batteries die prematurely? The failure is often hastened by impure water. Iron chloride and nitrates all increase local action and deterioration of the elements



Gas Operated Type

### The Improved "Rochlitz" Automatic Water Still

automatically supplies a stream of pure distilled water.

Operated with Gas, Gasoline, Kerosene, Steam or Electricity.

Costs 1/2 to 2c per gallon.

Mix your own electrolyte and save transportation charges on water and carboys. Highly recommended by all Storage Battery manufacturers.

YOUR PROFIT FROM THE SALE OF DISTILLED WATER WILL QUICKLY PAY FOR THE STILL

Manufactured by

**WEBER BROS. METAL WORKS**

120-128 N. Jefferson St., CHICAGO, ILL., U. S. A.

## Perfection Battery Mfg. Co. Makes Big Strides Plate Business Jumps 200,000 Plates in a Month



SEVERAL months ago the Perfection Battery Mfg. Co. added one of the greatest lead experts in America to its organization. Almost immediately this "Lead Man" did two remarkable things:

He improved the lead composition of which battery plates are made and brought down the price at the same time.

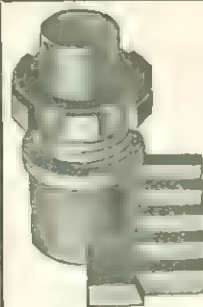
The result is the Perfection Battery Mfg. Co. now has such remarkable plates at such remarkable prices that every battery assembler and battery dealer who sees these plates, buys them immediately.

The Perfection Battery Mfg. Co. now has a stock of plates in twelve of the principal cities so that any one can now get plates immediately without delay. Write us and we will ship from nearest point.

Complete Batteries      Battery Plates  
Partly Assembled Batteries      Complete Parts

Write right now and tie up with the fastest growing plate business in America.

**Perfection Battery Mfg. Corp.**  
2300 So. LaSalle St. Chicago, Ill.



9-19 Plate Size

## GASKET SEAL STRAPS

and parts complete to make any size battery. Send for illustrated catalog and prices.

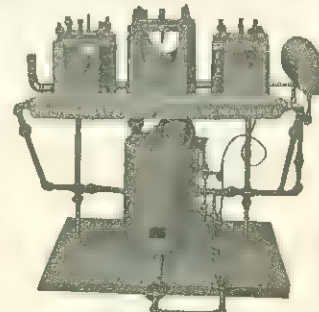


Dodge Size

**LIGHTNING BATTERY SERVICE CO.**  
Washington and Dean Sts. PROVIDENCE, RHODE ISLAND  
Address correspondence to Dept. A

## Our Dealers Are Making REAL MONEY ARE YOU ONE OF THEM?

The Only  
Combination  
Air  
and  
Sand Bag  
Vulcanizer  
On Market



Your Rush  
Must Come  
Mileage  
Guarantee On  
Tires Has  
Been  
Eliminated

A Live Dealers' Proposition      Representatives Wanted  
**TIRE MACHINE AND EQUIPMENT CO.**  
197 Lexington Ave. New York City



WE STICK  
TO THE THINGS WE SAY  
ABOUT  
THE

# KANT STICK BATTERY TESTER



A  
C  
C  
U  
R  
A  
C  
Y

D  
E  
P  
E  
N  
D  
A  
B  
I  
L  
I  
T  
Y

QUALITY

*Your Jobber Will Supply You*

SCRANTON GLASS INSTRUMENT CO.  
SCRANTON, PENNA.

## Auto Mechanics!

Stop that wasting time and breaking Rings—buy a Victory Piston Ring Compressor.

Fits all Size Pistons.

Used on any type motor.



List Price  
\$7.50



If your local jobber can not supply you write us direct.

The Victory Ring Compressor Co.

Sales Office:  
1441 So. State St.,  
Chicago

Factory:  
Grand Rapids,  
Mich.

Announcing  
Substantial Price Reductions  
ON

BESCO-PRODUCTS  
AND THEIR  
LATEST CATALOGUE No. 5  
(mailed on request)

THE BATTERY EQUIPMENT & SUPPLY CO., Inc.  
MANUFACTURERS

1458 Michigan Ave.,

Chicago, Ill.

## EQUIPMENT and SUPPLIES

For the Electric & Battery Service Station



Rotary Post Shaper Set for shaping and cleaning battery posts. Set consists of seven pieces. A cutter head for large, medium and small posts. A negative and positive cutter head for standard taper posts. Speedy brace—6 inch sweep. Straight shank for drill press. A very necessary tool in every battery shop.

M T S-1000 Complete  
set, net ..... \$4.05

## MEECO BATTERY TERMINALS

All types—elbow, split-back, cable and plug.

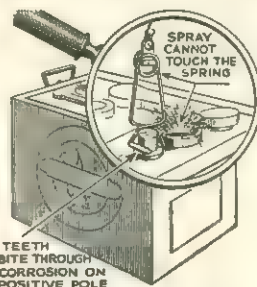
"Will test best by the best test."

Each \$0.12. Lots of 25 \$0.11. 100 assorted \$0.10½.

*Have you a copy of our catalogue M?  
If not, write for one.*

Motor Electrical Equipment Co.

1907 Elston Avenue  
Chicago, Ill.



TEETH  
BITE THROUGH  
CORROSION ON  
POSITIVE POLE

### PRICES:

Less than 10, each 20 cents  
Box of 10, each 17 cents  
Package of 100, each 14 cents  
Lots of 1,000, each 13 cents

"DON'T BUY 'EM TILL YOU TRY 'EM."

## Get Free Sample Tiger Recharg- ing Clip

Spring is 1¼ inches above battery spray; has double the spring tension of other clips and is guaranteed against breakage for two years; we replace clip free of charge that don't live up to guarantee. Capacity 50 amperes. Made of lead coated cold drawn steel.



Patents Pending

Du Chanois Electric Co.

661 BRYSON STREET

YOUNGSTOWN, OHIO

## GOT YOUR'S YET? THE BIG RED BOOK

"Everything for the  
Battery Service Station"

Your copy of the big red Grier Catalog is ready—and the New Price Sheet will open your eyes!

It's FREE—Ask for it

GRIER BATTERY SUPPLY CO.

435 E. Larned St.—Detroit  
Cleveland Branch—2036 18th St., E.



# AM-PLUS

**M** "Rugged"  
Plates

**P** "Rugged"  
Assemblies

**L** Dependable  
Batteries

**U** Write to-day for Newly Adjusted  
Prices and Discounts to the Trade

**S** "Better goods at better  
prices make better business"

**Am-Plus Storage Battery Co.**  
741 W. Van Buren St. CHICAGO

## Helios Special

PARTIAL ASSEMBLY

6 Volt	11 Plate	-	\$10.00
6 Volt	13 "	-	11.50
12 Volt	7 "	-	13.90

Gasket type complete with separators

**HELIOS BATTERY CO.**  
71 Chestnut St. Boston, Mass.



## MARKO BATTERIES

for  
AUTOMOBILES  
and  
RADIO

Quality Built Price Right  
Service Guaranteed

**Always  
Dependable**



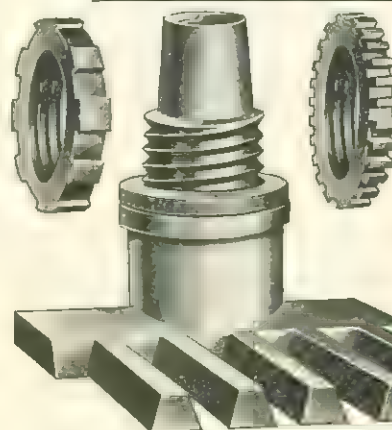
Some desirable sales and service station territory still open

**MARKO STORAGE BATTERY CO.**  
1400 Atlantic Avenue Brooklyn, N. Y.

## Unassembled Batteries

GASKET SEAL TYPE

6 Volt, 11 Plate,	\$ 8.95
6 Volt, 13 Plate,	10.25
12 Volt, 7 Plate,	12.81



**ALL  
PERFECT  
CASTINGS**

Sold in 100 lbs. Lots of Assorted Sizes, Including Lead and Rubber Washers for \$11.50

**Beacon Storage Battery Supply Co.**

THE BATTERY MAN'S SUPPLY BASE  
137-39 West Brookline St. Boston, Mass.

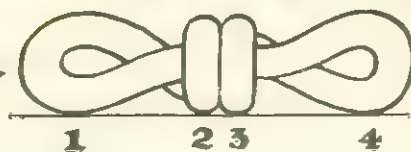


Cincinnati Quality Parts are now  
available at Prices that will interest  
you Let us quote on your requirements.

**The CINCINNATI STORAGE BATTERY CO.**  
Moormann Avenue, Cincinnati, Ohio



# WHY?



## This Tire Chain has 4 strong grips on the road per link

You no longer have to use cross chains made of low grade steel which is necessary to make welded links as we have perfected a link that is not welded and which therefore can be made of the high carbon alloy steel.

In every bag you will find two extra cross chains complete equipped with our latest

### "Snap Her On Attachment"

We give you these free as we feel every driver should have them handy.

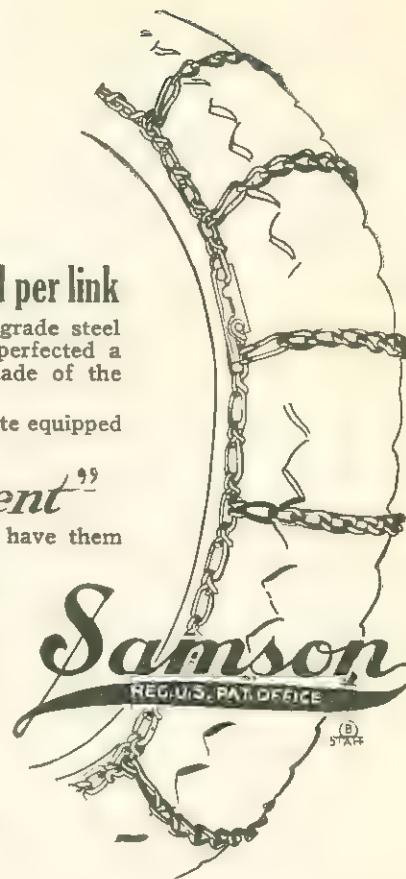
Our open easy fastener makes the putting on and taking off of tire chains a pleasure—quick, easy and positive.

You can buy many of your auto accessories direct from us—saving freight, labor, etc., as we have a full line of chain accessories.

Send for our catalog, you will like our method of doing business.

## THE CHAIN PRODUCTS CO

FORMERLY  
THE CLEVELAND GALVANIZING WORKS CO.  
CLEVELAND, OHIO, U. S. A.



# You'll Sell More Chains

## Because These Chains Last



They Cost No More  
and They Last

Lay in a stock of McKay Tire Chains—The Better Black Chains in the Red Band Bag. Display them in your window—identify yourself as a McKay Distributor—and you'll sell more tire chains than ever before.

McKay Chains completely fill the need and the demand for better chains. They are not only harder than ordinary chains—but *tougher* as well. And it's their remarkable toughness that makes them last longer.

You'll be interested in the McKay Proposition Book. It tells what we do to help you—with full page advertisements every month in The Saturday Evening Post, Country Gentleman and various automotive publications. Write for a copy today.

# MCKAY TIRE CHAINS

UNITED STATES CHAIN & FORGING COMPANY  
Union Arcade, Pittsburgh, Pa.

Makers of Chains for all Commercial and Industrial Purposes  
Plants at York and McKee's Rocks, Pa.; Columbus  
and Marietta, O.; Huntington, W. Va.

# MCK





# OFF'N'ON CHAINS

*make it easy to be safe!*

No lost chains with the positive locking device

This is the patented OFF'N'ON lock—simple and positive. The first or second link on the opposite end of the side chain is slipped into the notch—the clamp permitted to drop—and the chain ends are positively locked. A slight pressure of the thumb under the clamp end, immediately releases the lock. For less “take-up” than a link, the second notch in the lock can be used.

This OFF'N'ON lock is more than merely a fastener; it's a *tightener*! Its lever action not only assures a positive locking together of the ends of the chain—it quickly and easily *pulls them together and tightens the chain to the exact true fit* for the casing.

The 2 notches give double take-up

The lever draws up the slack as it closes

when closed the strain comes on solid piece of steel—not on lock lever

Locks here—tightest tension keeps it locked

Flat part is strong as any part of link

Double knot—adds strength—prevents stretching—gives smooth surface

Cross link slips on here—on flat side

Slides around here and is locked in by side chains

This patented slip-on link makes it easy to take off worn-out cross chains and put on new ones. A child can do it. OFF'N'ON Chains, with these special devices, cost no more.

These are some of the special patented features of OFF'N'ON Chains that make them rapid sellers. Order from your jobber today. Buy extra crosslinks, you can sell a set with each pair of chains.

*Write for circular and price list giving the name of your jobber*

**PYRENE MANUFACTURING COMPANY**

*Makers of Pyrene Fire Extinguishers*

520 Belmont Ave., Newark, N. J.

BRANCHES:

CHICAGO  
17 So. Jefferson Street

ATLANTA  
24 Nassau Street

KANSAS CITY  
1712 Grand Avenue

SAN FRANCISCO  
977 Mission Street



# MARVEL—"THE MILEAGE ACE"

## The Tire That Has Been Selected to Make The Trip Around The World



**"Marvel" Tires in Belgium  
on their way around the  
world.**

Aug. 20, 1922.

S. W. Tidd, Pres.,  
New Tread Tire Co.,  
E. Palestine, O.

Dear Mr. Tidd:

We have just traveled through Belgium and I think anything but a Marvel tire would have caused the most orthodox preacher to swear or the average tourist to go insane.

All of the Belgian roads, both in the city and country, are made of cobble stone. They are everlasting roads for wear but it doesn't take an intelligent man to see that they were never intended for the comfort of automobile tourists.

The machines bounced, rattled and fairly jumped over the rough roads, but due to the excellent flexibility and shock absorbent qualities of the heavy Marvel tires, we traveled over them at a fair rate of speed and with comparatively little vibration or bouncing.

We passed machine after machine which could only creep along because of the bouncing about and vibration of the car. With seventy pounds of air the Marvel tires carried us over these roads with the same comfort which we used to get on the ordinary brick road on any other tire.

Tourists and tire dealers in Belgium needed no further arguments as to the quality of our tires. We were the objects of envy by every automobile driver.

Very truly yours,

R. J. Jeffreys.

**Guaranteed for 10,000 Miles**

*DEALERS: Write for Samples,  
Literature and Exclusive Territory*

**The New Tread Tire Co.**  
EAST PALESTINE, OHIO,  
U. S. A.





## How Many Can You Sell?

Only \$1.40! And it's an attractive red enameled sturdy jack—just the thing for every light car owner.

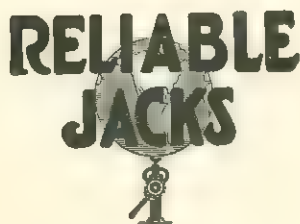
Which of your customers would not spend \$1.40 for a jack that can be relied upon? The No. 9 works every time and it can't get out of order. Most light cars are equipped with poor jacks—the owners are looking for a good reasonably priced jack. Here it is! There is a good profit for you on every sale.

Put one of these bright red jacks on your counter—and watch it attract attention. Put the price tag on it, too. "Only \$1.40." Price tags make sales.

And there is a Reliable Jack for the large car owner, too. A jack for every purpose. You only have to handle one line when you sell Reliables.

Fill in the coupon and see how quickly these jacks sell. Reliable Jacks are your best profit makers in the accessory line.

**"Ask 'em to buy"**



**WARNING TO DEALERS:** When you buy Reliable Jacks—be sure you get the product of the Elite Mfg. Co., Ashland, Ohio. The Reliable line is being widely imitated and this notice is given for your protection.

## Elite Manufacturing Co

Dept. 109

Ashland, Ohio

Use  
This  
Coupon

SPECIAL OFFER TO DEALERS. Fill out and attach this coupon to your letter head.

Elite Mfg. Co., Dept. 109, Ashland, Ohio. ....

Please send me one of these Jacks. You may bill me through my regular jobber, whose name is:

.....

Address.....

Send to.....

Address.....





# New Departure Ball Bearings

Preference for New Departure Ball Bearings by motor car makers of America proves that considerations of practical performance outweigh those of price.

The demand for New Departure Ball Bearings is well in step with the leaders of industrial progress. More New Departures are being sold to motor car manufacturers today than at any previous time in the history of this company,—a total output of 54,000 ball bearings per day and still growing,—evidence of the superiority of ball bearings as friction eliminants and of the *quality* of New Departure Ball Bearings in particular.

**The New Departure Manufacturing Co.**  
Bristol, Connecticut

Detroit Chicago

## EUROPEAN PLAN 600 ROOMS - 600 BATHS

Headquarters in Detroit for  
Old Colony Club Detroit Automobile Club  
Detroit Transportation Club



100 at \$2.50 Single	- - \$4.50 Double, per Day
150 " \$3.00 "	- - \$5.00 " " "
100 " \$4.00 "	- - \$6.00 " " "
50 " \$5.00 "	- - \$7.00 " " "
50 with Twin Beds,	\$5.00 to \$7.00 " "
100 In Suite, \$5.00 to \$8.00,	Double " "

Two Floors Agents Sample Rooms, \$5 per Day

Table d'Hote Dinner \$1.25 - \$2.00  
Business Men's Lunch 65c

## HOTEL TULLER

CAFETERIA A. McKENDRICK, Mgr. GRILLE

## IF YOU HAVE MADE ANY CHANGE

in your branch office or agencies please inform us at once and we will bring the facts to the notice of the trade through our medium of information.

## THE FERGUSON PUBLISHING CO.

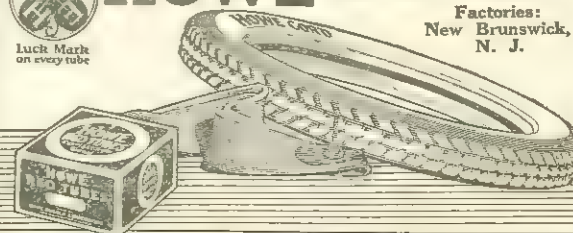
90 West Street New York

Never was the value of HOWE quality more pronounced from the dealer's viewpoint.



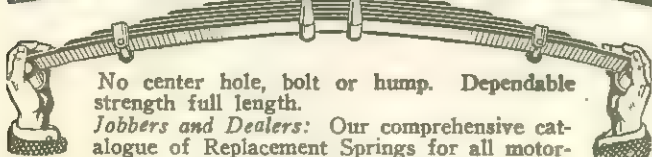
# HOWE

Howe Rubber Corporation  
General Sales Offices:  
Cook Bldg., Cleveland, O.  
Factories:  
New Brunswick,  
N. J.





## GET FULL MEASURE OF SPRING WEAR



No center hole, bolt or hump. Dependable strength full length.

*Jobbers and Dealers:* Our comprehensive catalogue of Replacement Springs for all motor-driven vehicles and liberal discounts show wonderful sales possibilities. Write for them.

**HIGGINS SPRING & AXLE CO.,** Dept. 1216 Racine, Wis.

### Sell This Popular Accessory

Every sale of a Shaler 5 Minute Vulcanizer is more than only one sale and one profit—it brings additional sales from the same customers, because they each need to buy the Patch-&-Heat Units regularly for use with the Shaler. This big repeat business comes to you—brings you regular profits—in addition to your profits from selling Shaler Vulcanizers—and without any effort on your part. Regardless of times or season, Shaler Vulcanizer sales bring steady repeat sale profits. Complete outfit retails for only \$1.50.

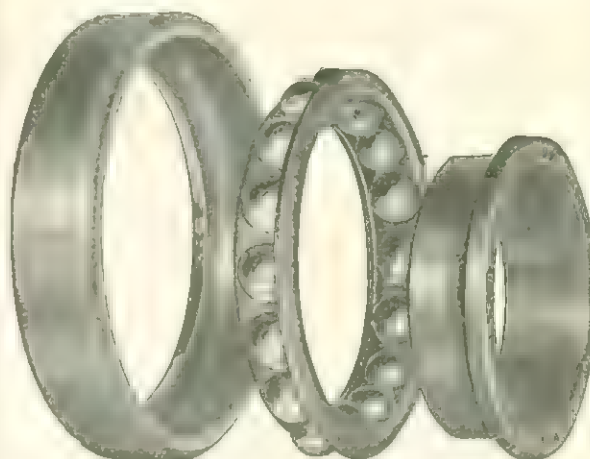


**SHALER**  
5 MINUTE VULCANIZER  
Type No. 5

Sold By All Jobbers

**C. A. Shaler Co.**  
446 Fourth St.,  
Wausau, Wis.

## The Bearings Company of America



Manufacturers of

**Thrust Ball Bearings**  
**Angular Contact Radial Bearings**  
**Angular Contact Thrust Bearings**

Bearings made to your B/P's and requirements—Your present Bearing sizes duplicated.

**The Bearings Company of America**  
Lancaster, Penna.

Detroit Office, 1012 Ford Bldg.

### Did you see our ad in the August Issue of Motor Record?

That was only one of the many records the "Marvel" has pulled down this year.

If your car is not equipped with a "Marvel" why not call on our nearest distributor or service station. If he is unknown write us for name and address.

**MARVEL CARBURETER CO.**  
FLINT, MICH.

### THE BEST JOB IN THE SHORTEST TIME



PEP is THE ORIGINAL non-freezing, non-drying, water-mixed compound. Many imitate but none can copy nor equal Patented Pep.

PEP contains no grease nor anything to hinder grinding.

One grade is all that's needed for any job.

PEP will stand double pressure on the work without ringing or grooving.

PEP will make you feel like a *Profi-teer* if you use it and then charge standard prices for valve grinding.

PROVE IT AT OUR EXPENSE. SEND FOR FREE SAMPLE

**PEP MFG. CO., Inc.**

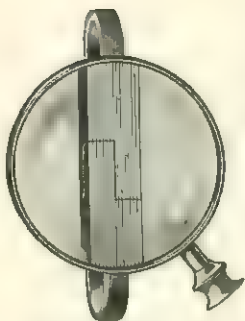
33 West 42nd Street

New York City



# EVERYDAYS

*seat faster!*



Quick Seating Turned Face.  
Fine lathe turning produces a  
velvet face that will seat faster

No repairman or motorist likes to "baby" an engine to seat piston rings.

You want rings that give immediate results—rings that seat quicker and better—rings that make the motorist feel good whenever he thinks about them being in his car.

*Everydays* are that kind. They seat so that they satisfy—completely.

It's due to their fast-seating, velvet-finish face, produced by fine lathe cutting.

*Everydays* wear evenly and smoothly all around. They maintain an even and constant wall pressure under all temperatures and compressions. *Everydays therefore can't leak!*

They satisfy the motorist because they give quick results—save gasoline and oil—increase power—and eliminate carbon and oil pumping.

Besides, there's more profit for you in every ring you sell—if they are *Everydays*. *Everyday* features help you to sell more rings. Result: MORE profit on MORE Rings.

All standard sizes from 2 inches up. Over-sizes .010, .020, .030. List prices: up to 4 inches incl., .50; 4 $\frac{1}{8}$  to 4 $\frac{1}{4}$  inches incl., .60; 4 $\frac{5}{8}$  to 5 inches incl., .70. Sold through jobbers everywhere. Resold by leading dealers.

**Write NOW for *Everyday's* Xtra  
Profit Sales Plan**

Patent No. 1,132,762  
March 23, 1915



## EVERYDAY PISTON RING CO. INC.

EAST ROCHESTER, N.Y.



# When in Chicago

*STOP AT*



*The Apartments are light and roomy*

## **HOTEL SOMERSET**

*Chicago's Most Pleasant Hotel*

Rooms single or en suite      Rates \$4.00 per day and up  
All rooms have private bath

EUROPEAN PLAN      SPLENDID CAFE  
ALSO  
KITCHENETTE APARTMENTS DE LUXE

*For occupancy by week, month or year*

We will be pleased to send interesting literature and reservations will have careful attention

*Management, S. W. GERSTNER*



# LIST OF ADVERTISERS

	PAGE		PAGE
Ahlbell Btty. Container Corp.....	58	Motor Wheel Corp.....	158
Ahlberg Bearing Co. ....	113	Motor Elec'l Equip. Co.....	146
Am-Plus Storage Btty. Co.....	147		
Atterbury Motor Car Co. ....	36-37	New Departure Mfg. Co.....	152
		New Tread Tire Co.....	150
Battery Equip. & Sup. Co.....	146		
Beacon Storage Btty. Sup. Co.....	147	Ohio Pattern Wks. & Fdry. Co.....	144
Bearings Co. of America.....	153		
Bearings Service Co.....	134	Packard Motor Car Co.....	48-49
Bock Bearing Co. ....	3	Pep Mfg. Co.....	153
		Perfection Battery Mfg. Corp.....	145
Chain Products Co. ....	148	Pomeroy Elec. Co.....	144
Cincinnati Storage Btty. Co.....	147	Prest-O-Lite Co., Inc.....	12
Cole Motor Car Co.....	38-39	Price Battery Supply Co., W. F.....	142
Cole Storage Battery Co.....	2	Pruitt-Deming Mfg. Co.....	142
Columbia Motors Co.....	—	Puritan Machine Wks.....	147
		Pyrene Mfg. Co.....	149
Du Chanois Elec. Co., C. F.....	146		
		S. K. F. Industries, Inc.....	118
Elite Mfg. Co.....	151	Scranton Glass Ins. Co.....	146
Everyday Piston Ring Co.....	154	Shaler Co., C. A.....	153
		Shontz Co., H. B.....	144
Fafnir Bearing Co.....	130	Somerset Hotel .....	155
Federal Motor Truck Co.....	40-41	Stewart Motor Corp.....	50-51
		Stutz Motor Car Co.....	140-141
General Lead Batteries Co.....	62		
General Motors Truck Co.....	42-43	Timken Roller Bearing Co.....	Front Cover
Goodrich Rubber Co., B. F.....	4	Tire Machine & Equip. Co.....	145
Gramm-Bernstein Motor Truck Co.....	44-45	Tuller Hotel .....	152
Grier Battery Sup. Co.....	146		
		U. S. Ball Bearing Mfg. Co.....	126
Hartford Battery Mfg. Co.....	142	U. S. Chain & Forging Co.....	148
Hazelett Storage Battery Co.....	144	Universal Battery Co.....	60
Helois Battery Co.....	147		
Hess-Bright Mfg. Co.....	118	Vesta Battery Corp.....	56
Higgins Spring & Axle Co.....	153	Victor Storage Battery Co.....	145
Howe Rubber Co.....	152	Victory Ring Compressor Co.....	146
Hupp Motor Car Corp.....	46-47		
		Weber Bros. Metal Works.....	145
Illinois Battery Steamer Co.....	145	Westinghouse Union Battery Co.....	139
		Willard Storage Battery Co.....	74
Lightning Battery Service Co.....	145	Witherbee Storage Battery Co.....	142
Linde Air Products Co.....	20		
		Yale Storage Battery Co.....	143
Marko Storage Battery Co.....	147		
Marvel Carbureter Co. ....	153		
Metal Specialties Mfg. Co.....	157		



ASK 'EM TO BUY

**Presto Cigar Lighter**  
Electric



## Smokes for Your Customers—Dollars for You

Your customer knows how hard it is to "light up" while driving. The Presto Electric Cigar Lighter is just what they've been looking for. *Installed on the dash*, it's always ready for use—enough cord furnished to reach everyone in the car. Current automatically turns on when lighter is pulled out of socket. Cord winder pulls lighter back into socket and automatically shuts off current. The only electric cigar lighter with a safety fuse to protect the battery.

At the retail price of \$6.00 the Presto Cigar Lighter is a ready seller and a real profit-maker for jobbers and dealers.

## The Presto Electric Heater

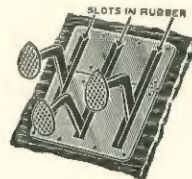


only  
**\$3.50**

Sells on sight. It's just what motorists everywhere have been looking for—a motor heater that keeps the motor and radiator warm in the coldest weather. Convenient hook for hanging the heater under the hood next to the radiator. Cheaper than heating the whole garage. Attaches to any 110-volt electric light socket—a.c. or d.c.

Perfectly safe—the coil never gets red. Draws only  $1\frac{1}{2}$  amperes of current. Furnished complete with 10 feet of cord.

## The All-Weather Foot Protector —for Fords



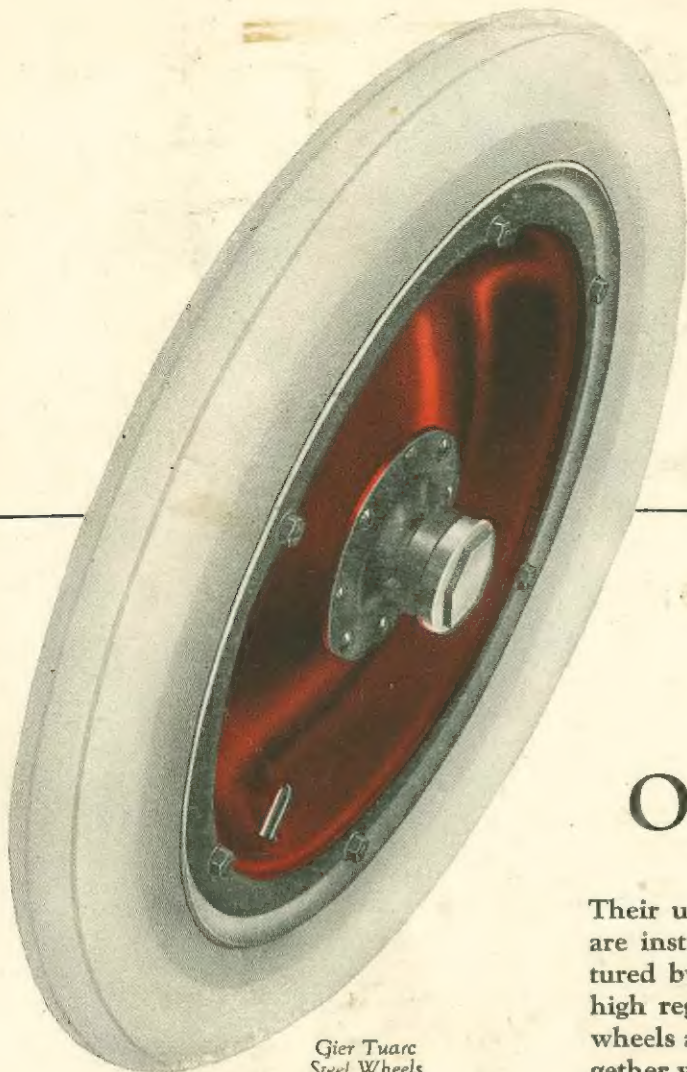
Prevents cold air from entering the car through the pedal slots in winter—keeps a Ford snug and warm. Every Ford owner needs this protection. Close-fitting, rubber pads attached to steel plates permit free manipulation of pedals also includes pads for emergency brake lever. Easily and quickly attached by anyone. The big season for selling is here. Don't be caught without a stock to meet this big demand. Order from your jobber today.

We manufacture over 100 Presto quick-selling motor necessities.

*There's a handsome profit on every sale.*

**METAL SPECIALTIES MFG. CO.**  
338-352 N. KEDZIE AVE. CHICAGO, ILL.





Gier Tuarc  
Steel Wheels

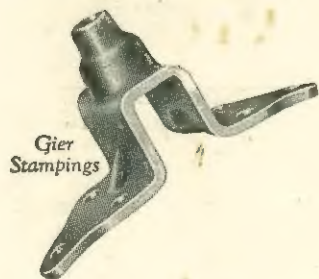


## Outlive Car or Truck

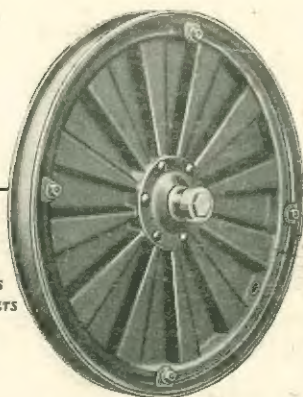
Their unfailing ability to outlive the product in which they are installed has invested the automotive essentials manufactured by the Motor Wheel Corporation with a peculiarly high regard. So it is but natural that Motor Wheel truck wheels are used in greater quantity than any other make, together with millions of passenger car wheels every year; that Gier Tuarc and Gier-Lewis wheels occupy a position so commanding among steel wheels; and that Gier stampings are the quality standard of the industry.

**MOTOR WHEEL CORPORATION, LANSING, MICHIGAN**

Motor Vehicle Wheels Complete — Metal Stampings — Steel Products

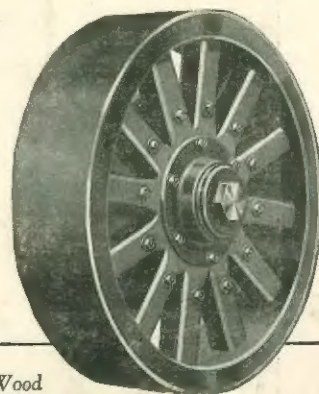
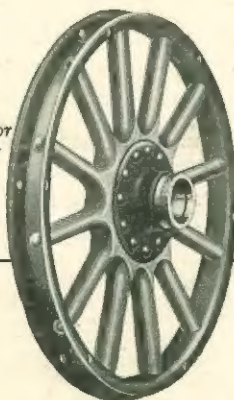


Gier  
Stampings



Gier-Lewis  
Steel Wheels  
for Light Cars

Wood  
Wheels for  
Passenger  
Cars



Wood  
Wheels  
for Trucks